

Appendix A: Summary of allied health service delivery models

The following table is a summary of models of service delivery that were either provided to the taskforce through the consultation process or were identified within the literature. The majority of the models of care use the full scope of practice of the allied health professions. In appropriate contexts, some extended scope tasks have been added to the practice of an allied health professional to better meet patient needs. Where this is the case, this is noted in the 'extended

scope' column. If an extended scope task is known to require a legislative or policy change prior to it being able to be implemented within the Queensland Health context, this is denoted by a * in the extended scope column.

A number of models using the allied health support workforce are also presented. Where a model involved delegation, this is noted in the 'delegated' column.

| Acute | | | | | |
|---|--|--|-----------|----------------|----------------------|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>1. Initiative Allied health acute medical clinical leader</p> <p>Location Medical Assessment and Planning Unit, Toowoomba Hospital Darling Downs Hospital Health Services, Queensland</p> <p>Workforce Multidisciplinary</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>An allied health clinical leader role was established to provide assessment and intervention as the first point of contact for allied health for patients in the Medical Assessment and Planning Unit (MAPU).</p> <p>A framework of skill-sharing was introduced across physiotherapy, occupational therapy, podiatry, speech pathology, nutrition and dietetics, psychology and social work.</p> | <p>Patients discharged 82 hours earlier than those seen by standard care therapists.</p> <p>Initial allied health assessment provided 11 hours earlier than the standard care service</p> <p>At one month follow-up, patients demonstrated superior outcomes for balance and mobility and self-reported quality of life.</p> <p>Reduced emergency department re-presentation (10% compared to 24% at 1 month).</p> | | | Improve patient flow |
| <p>2. Initiative Dietitians and speech pathologists in stroke management</p> <p>Location UK, USA, Canada</p> <p>Workforce Nutrition and dietetics Speech pathology</p> <p>Model Established practice</p> <p>Reference Wright, L. et al (2009). Dysphagia and nutrition: An extended scope of practice. <i>Proceedings of the Nutrition Society</i> 68, (OCE1): E59</p> | <p>For stroke patients, dietitians screen for and manage dysphagia while speech pathologists screen for and manage malnutrition.</p> | <p>Patients assessed and treated more quickly.</p> <p>Earlier intervention through more timely and accurate referrals can improve nutritional status and overall health in patients with dysphagia.</p> | | ✓ | Improve patient flow |

| Acute | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>3. Initiative Fibreoptic endoscopic evaluation of swallowing (FEES) clinics</p> <p>Location Princess Alexandra Hospital, Royal Brisbane and Women's Hospital, The Townsville Hospital, Gold Coast Hospital, Queensland</p> <p>Workforce Speech pathology</p> <p>Model Established practice</p> <p>Reference www.heath.qld.gov.au</p> | <p>Four regular and established FEES clinics across Queensland.</p> <p>Development and implementation of a FEES competency training program—introductory and advanced levels.</p> <p>Patients requiring dysphagia assessment with FEES can be managed by a speech pathologist without need for referral to an ENT surgeon, or can be removed from an ENT waiting list.</p> <p>Not dependent on access to radiology suite/ENT.</p> <p>Can be repeated flexibly as required.</p> | <p>Reduced waiting time for instrumental dysphagia examinations.</p> <p>Reduction of 24–48 hours for urgent referrals.</p> <p>Timely commencement of patient diet/fluid recommendations.</p> <p>Reduced duplication of attendance for dysphagia assessment and ENT assessment.</p> <p>Reduced referral to radiology for videofluoroscopy by 25%.</p> | | ✓ | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |
| <p>4. Initiative Initial dysphagia screening by speech pathology assistants</p> <p>Location Monash Health, Victoria</p> <p>Workforce Speech pathology Allied health assistance</p> <p>Model Established practice</p> <p>Reference Department of Health, Victoria (2012). <i>Supervision and delegation for allied health assistants</i>, www.health.vic.gov.au/workforce/reform/assistant.htm</p> | <p>Speech pathology assistants on an adult medical ward:</p> <ul style="list-style-type: none"> conducted dysphagia screening planned, performed and monitored mealtime performance for diet and fluids provided feeding assistance in non-complex videofluoroscopy procedures for adult patients. | <p>Audits showed:</p> <ul style="list-style-type: none"> dysphagia screening tool valid and reliable no adverse outcomes identified speech pathology assistant decisions 100% consistent with speech pathologist. <p>Seven hours per week of speech pathologist time was released allowing speech pathologists to perform diagnostic assessments and provide treatment to patients with complex needs.</p> | ✓ | | Improve patient flow |
| <p>5. Initiative Malnutrition screening by nutrition assistants</p> <p>Location Princess Alexandra Hospital, Metro South Hospital and Health Services, Queensland</p> <p>Workforce Allied health assistance</p> <p>Model Single centre study</p> <p>Reference Murray, E. et al. (2013). Malnutrition screening solutions in Medical Assessment and Planning Unit. <i>Nutrition and Dietetics</i>. 70 (Suppl. 1) :18. Miller, K. et al (2013). Accuracy of malnutrition screening more than one year post training. <i>Nutrition and Dietetics</i>. 70 (Suppl 1) :36</p> | <p>Nutrition assistants were trained to implement nutrition screening at a tertiary teaching hospital.</p> | <p>Reduced cost of training.</p> <p>Improved rates of screening (>80% compared to 30%)</p> <p>Higher accuracy screening completion (100%)</p> <p>Substantially lower cost compared to other workforce.</p> <p>Expected outcome:</p> <ul style="list-style-type: none"> optimal use of nursing staff skills and time. | ✓ | | Improve patient flow |

| Acute | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>6. Initiative Nutrition assistant in rural setting</p> <p>Location Orange Base Hospital, New South Wales</p> <p>Workforce Allied health assistance</p> <p>Model Single centre study</p> <p>Reference Scott, E. et al. (2009). Optimising nutrition and improving outcomes for patient and provider through implementation of nutrition assistant in a rural health service. <i>Nutrition and Dietetics</i>, 66: A17</p> | <p>Nutrition assistants were introduced into wards to complete work processes developed by dietitians.</p> | <p>Improved nutritional intake leading to:</p> <ul style="list-style-type: none"> • reduced readmissions • reduced length of stay • increased cost efficiencies • increased bed availability. | ✓ | | Improve patient flow |
| <p>7. Initiative Occupational therapy allied health assistant on the acute medical ward</p> <p>Location The Townsville Hospital, Townsville Hospital and Health Service, Queensland</p> <p>Workforce Occupational therapy Allied health assistance</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Allied health assistant employed to complete important but delegable tasks for patients with complex medical needs and extended hospital admissions to enable the occupational therapist to work to their full scope of practice.</p> | <p>Improved service delivery</p> <p>Expected outcomes:</p> <ul style="list-style-type: none"> • improved patient function • reduced length of stay • reduced adverse events. | ✓ | | Improve patient flow |
| <p>8. Initiative Pharmacist in operating suite</p> <p>Location Austin Health, Victoria</p> <p>Workforce Pharmacy</p> <p>Model Established practice</p> <p>Reference Booth, J et al. (2012). Establishing clinical pharmacy services in the operating suite. <i>J Pharmacy Practice and Research</i>, 42:296-9</p> | <p>Pharmacist assumes a role in:</p> <ul style="list-style-type: none"> • medication supply • medication waste minimisation • legal compliance • medication advice to staff • perioperative antimicrobial prescribing • perioperative management of patient's regular medication. | <p>Cost minimisation</p> <p>Clinical benefits:</p> <ul style="list-style-type: none"> • medication safety • antibiotic stewardship • quality use of medicines. | | ✓ | Improve patient flow |
| <p>9. Initiative Pharmacist initiated e-Script transcription project</p> <p>Location Peninsula Health, Victoria</p> <p>Workforce Pharmacy</p> <p>Model Established practice</p> <p>Reference www.hwainventory.net.au</p> | <p>Medical officer refers patients to pharmacist 24 hours before discharge. Pharmacist reconciles current and preadmission medications and prepares and prints prescriptions. Medical officer confirms and signs prescriptions.</p> <p>Pharmacist details medication changes and reasons for changes. Details are automatically populated into a discharge summary. Pharmacist provides a role model for junior medical officers regarding safe prescribing.</p> | <p>Earlier patient discharge</p> <p>Reduced waiting times</p> <p>Improved opportunities for education of junior medical officers</p> <p>Fewer prescribing errors</p> <p>Reduced clerical workload for medical officers</p> | | | Improve patient flow |

| Acute | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>10. Initiative Pharmacist-led lipid clinic</p> <p>Location Barwon Health, Victoria</p> <p>Workforce Pharmacy</p> <p>Model Single centre study</p> <p>Reference Weeks, G. et al. (2012). Hospital pharmacist-led lipid clinic for surgical patients with PVD at a regional Australian hospital. <i>J Pharmacy Practice and Research</i>, 42:17-21</p> | <p>Pharmacist trained by a cardiologist.</p> <p>Surgical patients with peripheral vascular disease were reviewed by a pharmacist over four, 6-weekly visits and provided with lifestyle advice, lipid measurements and statin therapy if required.</p> | <p>Patients had lowered high-density lipoprotein cholesterol levels compared with control group.</p> | | ✓ | Reduce outpatient department waiting time |
| <p>11. Initiative Pharmacy checking technicians</p> <p>Location Multiple sites across USA</p> <p>Workforce Allied health assistance</p> <p>Model Established practice</p> <p>Reference Adams, A. et al. (2011). "Tech-Check-Tech" A review of the evidence on its safety and benefits. <i>American Journal of Health-System Pharmacy</i>, 68:1824-33</p> | <p>Appropriately qualified technicians check that prescriptions are accurately filled, leaving the pharmacist to check whether it is clinically appropriate.</p> | <p>Published evidence demonstrates that pharmacy technicians can perform as accurately as pharmacists.</p> <p>Released pharmacist time.</p> | ✓ | ✓* | Improve patient flow |
| <p>12. Initiative Pharmacy support staff</p> <p>Location Princess Alexandra Hospital, Metro South Hospital Health Service, Queensland</p> <p>Workforce Pharmacy Pharmacy assistants/technicians</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Pharmacy assistants/technicians performed an advanced scope role as part of a ward-based clinical pharmacy team servicing four medical wards.</p> | <p>Ward-based pharmacy assistant/technician roles improved:</p> <ul style="list-style-type: none"> • ward medication management • organisation and efficiency of ward pharmacy services • patient waiting times for medications • patient waiting times in emergency department • pharmacists' and nurses' workloads. | ✓ | | Improve patient flow |
| <p>13. Initiative Placement of feeding tubes by dietitians</p> <p>Location Baylor University Medical Centre, USA</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Tynan, C. et al (2008). Placement of small bowel feeding tubes by advanced practice dietitians: common practice? <i>Support Line</i>, August: 12-20</p> | <p>Dietitian and nurse teams in the intensive care unit trained to insert small bowel feeding tubes using electromagnetic tube placement device technology.</p> <p>Initial pilot of 101 small bowel feeding tube placements showed higher success rates compared to traditional methods.</p> | <p>Initial pilot of 101 small bowel feeding tube placements showed:</p> <ul style="list-style-type: none"> • lower radiography costs • reduced time to initiation of feeding compared to traditional methods. | | ✓ | Improve patient flow |

| Acute | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>14. Initiative Podiatric high-risk foot coordinator</p> <p>Location Great Western Hospital, Swindon, UK</p> <p>Workforce Podiatry</p> <p>Model Established practice</p> <p>Reference Cichero, M. et al. Reducing length of stay for acute diabetic foot episodes using an extended scope of practice podiatric high-risk foot coordinator in an acute foundation trust hospital. Ahead of publication</p> | <p>Introduction of a podiatric high-risk foot coordinator to focus on more efficient and timely management of people with complex diabetic foot disease.</p> | <p>Average length of stay for patients with complex diabetic foot disease reduced by 10 days.</p> <p>No statistically significant difference in readmission rates.</p> | | | Improve patient flow |
| <p>15. Initiative Social work assistant role</p> <p>Location Mater Health Services, Queensland</p> <p>Workforce Allied health assistance</p> <p>Model Established practice</p> <p>Reference www.health.qld.gov.au</p> | <p>The social work assistant role was introduced within a delegation model.</p> | <p>Enable social workers to operate at full scope of practice and undertake more complex tasks.</p> <p>Productivity and cost-effectiveness benefit with a 20% increase in number of new patients seen, and an 11% reduction in cost per occasion of service.</p> | ✓ | | Improve patient flow |
| <p>16. Initiative Speech pathology tracheostomy suctioning</p> <p>Location Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland</p> <p>Workforce Speech pathology</p> <p>Model Single centre study</p> <p>Reference Speech Pathology Department, Nambour Hospital</p> | <p>Speech pathologists are trained to undertake tracheal suctioning in non-complex, non-ventilated tracheostomy patients who are located on general hospital wards, not including the intensive care unit.</p> <p><i>Queensland Health interdisciplinary tracheostomy suctioning skills development framework for nursing, physiotherapy and speech pathology has been developed.</i></p> | <p>Expected outcomes:</p> <ul style="list-style-type: none"> • successful implementation of training to appropriately skilled speech pathologists to undertake tracheal suctioning during swallow assessments of tracheostomised patients • release capacity of nursing and physiotherapy workforce to undertake other patient care duties. | | ✓ | Improve patient flow |
| <p>17. Initiative Tracheostomy weaning and decannulation by physiotherapists, speech pathologists and nurses</p> <p>Location University Hospital of Wales, UK</p> <p>Workforce Physiotherapy Speech pathology</p> <p>Model Single centre study</p> <p>Reference National Leadership and Innovation Agency for Health, Wales. (2010). <i>Development of training programme and service mode to facilitate timely, tracheostomy weaning and decannulation.</i> www.nliah.com</p> | <p>The program empowers the ward-based multidisciplinary team to facilitate timely and effective weaning for patients with tracheostomy tubes.</p> <p>An initial training program was developed and delivered by the clinical specialist physiotherapist and speech pathologist.</p> <p>Links with the consultant clinical lead for critical care allowed development of strategies and processes to formalise care for complex patients.</p> <p>Physiotherapy and speech pathology departments developed profession-specific competency documents to enable individuals to direct learning and development needs.</p> | <p>Timely weaning through to successful decannulation impacted positively on overall patient experience.</p> <p>Timely repatriation of patients to their referring hospital.</p> <p>Timely repatriation of patients to community and rehabilitation options where many rehabilitation facilities have either limited or no provision for patients with a tracheostomy.</p> <p>Released nursing time from 2-hourly tracheostomy cares towards other elements of patient care.</p> | | | Improve patient flow |

| Acute | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>18. Initiative Transdisciplinary screening and intervention in nutrition, cognition, communication and swallowing</p> <p>Location Eastern Health, Victoria</p> <p>Workforce Speech pathology Nutrition and dietetics</p> <p>Model Single centre study</p> <p>Reference Porter, J. et al. (2012). Transdisciplinary screening and intervention – an opportunity to extend dietic practice. <i>Nutrition and Dietetics</i>, 69 (suppl. 1) :30</p> | <p>Early screening and intervention for nutrition, cognition, communication and swallowing deficits were provided for medical admissions in a large metropolitan hospital with no weekend dietetic or speech pathology service.</p> <p>Using validated tools, dietitians placed patients on ‘nil by mouth’ if sub-optimal results were demonstrated on a speech pathology screen. Speech pathologists commenced patients on high energy diets if they were identified with malnutrition.</p> | <p>As a result of successful implementation of education and training to appropriately skilled speech pathologists and dietitians, screening across both clinical practice areas was implemented to better meet patient needs, particularly out of regular business hours.</p> | | ✓ | Improve patient flow |
| <p>19. Initiative Warfarin dosing by pharmacists</p> <p>Location Brighton General Hospital, UK</p> <p>Workforce Pharmacy</p> <p>Model Single centre study</p> <p>Reference Burns, N. (2004). Evaluation of warfarin dosing by pharmacists for elderly medical in-patients. <i>Pharmacy World and Science</i>, 26:232-7</p> | <p>Pharmacists controlled warfarin dosing for elderly medical patients.</p> | <p>Beneficial effect on most aspects of anti-coagulation control.</p> | | ✓ | Improve patient flow |

| Cancer Care | | | | | |
|--|--|--|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>20. Initiative Allied Health Radiation Oncology Centre</p> <p>Location Cairns Base Hospital, Cairns and Hinterland Hospital and Health Service, Queensland</p> <p>Workforce Speech pathology Occupational therapy Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Radiation Oncology Centre, Cairns Base Hospital</p> | <p>This project runs from July 2012 to June 2014.</p> <p>Using a <i>skill-sharing and delegation practice framework (Calderdale Framework)</i> to identify and train for skill-share tasks for:</p> <ul style="list-style-type: none"> speech pathology and physiotherapy, including oral secretion management (oral cavity and oropharyngeal suctioning), basic respiratory assessment (including auscultation) and tracheostomy management occupational therapy and physiotherapy, including assessment of a patients' mobility, mobility on stairs and balance. | <p>Expected outcomes:</p> <ul style="list-style-type: none"> reduced duplication and waste to allow for a more efficient and effective service delivery improved access to radiation oncology allied health services for patients and their families affected by cancer. | | ✓ | Improve patient flow |
| <p>21. Initiative Breast practitioner</p> <p>Location Peter MacCallum Cancer Centre, Victoria</p> <p>Workforce Radiation therapy</p> <p>Model Established practice</p> <p>Reference Peter MacCallum Cancer Institute. (2012). <i>Evaluation of specialist practitioner radiation therapist roles at Peter MacCallum Cancer Centre</i>, Report provided to Department of Health, Feb 10 2012</p> | <p>Breast practitioner role developed in 2005.</p> <p>Radiation oncologist delegated the responsibility for breast tissue/field border delineation in computed tomography (CT) pre-planning to trained and credentialed radiation therapists for defined patient groups.</p> <p>Training provided by university and mentoring in-house.</p> | <p>Improved workflow efficiencies at CT simulation.</p> <p>Improved patient experience.</p> <p>Radiation oncologist can simulate patients off-site.</p> <p>Streamlined planning process post-simulation.</p> | | ✓ | Improve patient flow |
| <p>22. Initiative Radiation therapists in breast and urological cancer treatment</p> <p>Location Multiple sites accross Australia</p> <p>Workforce Radiation therapy</p> <p>Model Multi-centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Projects to develop senior radiation therapists' capacity to play a greater role in the continuum of radiation therapy for patients with breast and prostate cancer.</p> | <p>Expected outcomes:</p> <ul style="list-style-type: none"> radiation oncologists' time freed to perform other duties patient waiting times reduced better use of the knowledge, skill and abilities of both radiation oncologists and radiation therapists improved capacity of the system to deal effectively with workload increase. | | | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |

| Cancer Care | | | | | |
|--|---|--|-----------|----------------|----------------------|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>23. Initiative Imaging practitioner</p> <p>Location Peter MacCallum Cancer Centre, Victoria</p> <p>Discipline Radiation therapy</p> <p>Model Established practice</p> <p>Reference Peter MacCallum Cancer Institute. (2012). <i>Evaluation of specialist practitioner radiation therapist roles at Peter MacCallum Cancer Centre</i>, Report provided to Department of Health, Feb 10 2012</p> | <p>Delegation from radiation oncologist for cone beam computed tomography (CBCT), soft tissue assessment and contouring organs at risk during radiation therapy planning.</p> | <p>Reduced radiation oncology contouring time.</p> <p>Release radiation oncologist time for other clinical tasks.</p> <p>Improved efficiencies in the image review process—CBCT.</p> | | ✓ | Improve patient flow |
| <p>24. Initiative Radiation therapist in planning target volume delineation of patients with prostate cancer</p> <p>Location Newcastle-upon-Tyne, UK</p> <p>Workforce Radiation therapy</p> <p>Model Established practice</p> <p>Reference Wilkinson, J. et al. (2005). Work-based learning, role extension and skills mix within dose planning: Target volume definition for carcinoma of the prostate by non-clinicians. <i>Clinical Oncology</i>, 17:199–202</p> | <p>The radiation therapist was provided with training by a radiation oncologist.</p> <p>The oncologist supervised an agreed number of cases before the therapist completed a number of unsupervised cases subsequently reviewed by the oncologist.</p> <p>After being deemed competent, the therapists went on to delineate target volume, critical organs and generate an appropriate plan.</p> <p>The oncologist would review the complete 'package' prior to the treatment commencing.</p> | <p>Positive effect on the workload of the radiation oncologist.</p> <p>Streamlining patient throughput and reducing delays.</p> | | ✓ | Improve patient flow |
| <p>25. Initiative Radiation therapist in the Radiation Oncology Mater Centre</p> <p>Location Radiation Oncology Mater Centre, Metro South Hospital and Health Service, Queensland</p> <p>Workforce Radiation therapy</p> <p>Model Single centre study</p> <p>Reference Radiation Oncology Mater Centre, Metro South Hospital and Health Service</p> | <p>The radiation therapist manages and performs simple palliative treatments.</p> <p>The radiation therapist participates in all stages of the treatment process, beginning with attending the clinic and liaising closely with the radiation oncologist, to booking timely appointment slots, through to the technical radiation therapy components of simulation, planning and treatment.</p> <p>In 2011, 54% of patients treated at the Radiation Oncology Mater Centre were treated with palliative intent.</p> | <p>Expected outcome:</p> <ul style="list-style-type: none"> improved capacity of the current workforce to deliver more streamlined and individualised services to palliative care patients. | | ✓ | Improve patient flow |

| Cancer Care | | | | | |
|---|---|---|-----------|----------------|---|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>26. Initiative Speech pathology telehealth service for head and neck cancer patient support</p> <p>Location Royal Brisbane and Women's Hospital, Nambour Hospital, Hervey Bay Hospital, Rockhampton Hospital, Queensland</p> <p>Workforce Speech pathology</p> <p>Model Multi-centre study</p> <p>Reference Burns, C. et al. (2012). A pilot trial of a speech pathology telehealth service for head and neck cancer patients. <i>J TelemedTelecare</i>, 18:443-6</p> | <p>Speech pathologists provided a telehealth clinic for head and neck cancer by using a digital quality telehealth system.</p> <p>All clinicians reported that they were able to satisfactorily and competently assess the client using the Telehealth system.</p> <p>All clinical issues were effectively managed during telehealth sessions.</p> <p>All patients agreed that they would be comfortable to use telehealth if it was available in their local facility.</p> | <p>No patients were required to travel to RBWH for face-to-face appointments.</p> | | | <p>Improve health services for regional, rural and remote communities</p> |

| Diagnostic Services | | | | | |
|--|---|---|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>27. Initiative Musculoskeletal examinations by sonographers</p> <p>Location Hull Royal Infirmary, UK</p> <p>Workforce Sonography</p> <p>Model Established practice</p> <p>Reference NHS Modernisation Agency. (2004). <i>Ultrasound service improvement: An in depth look at the impact and benefits for patients and staff – A collection of local case studies</i>, www.improvement.nhs.uk/diagnostics</p> | <p>Sonographers trained to perform musculoskeletal therapeutic steroid injections and produce independent reports.</p> | <p>Average reduction of 768 patients per annum (40% reduction – wait time previously 14 months).</p> <p>Patients have an option of being treated closer to home which is important as often uncomfortable post-injection.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |
| <p>28. Initiative CT examinations by nuclear medicine technologists</p> <p>Location Multiple sites across Victoria, New South Wales and South Australia</p> <p>Workforce Nuclear medicine technology</p> <p>Model Established practice</p> <p>Reference The Victorian Society of Nuclear Medicine Technologists Inc. (2010) <i>Diagnostic CT for Molecular Imaging Course Information Booklet 8/13</i>, www.vsnmt.com</p> <p>Bar-Shalom, R. (2003). Clinical performance of PET/CT in evaluation of cancer: additional value for diagnostic imaging and patient management. <i>J Nucl Med</i>, 44 : 1200-1209</p> | <p>The Victorian Society of Nuclear Medicine Technologists (VSNMT) in collaboration with RMIT University and a senior CT radiographer have developed a program to train nuclear medicine technologists to perform routine diagnostic CT examinations at the same time as a positron emission tomography—computed tomography (PET/CT) scan.</p> <p>Nuclear medicine technologists who complete the course will be granted a radiation use licence to perform diagnostic CT on hybrid systems in Victoria, New South Wales (EPA) and South Australia (EPA). The VSNMT is waiting on a decision in Queensland.</p> | <p>Hybrid PET/CT improves the diagnostic interpretation of PET and CT in cancer patients and has an impact on both diagnostic and therapeutic aspects of patient management.</p> | | ✓ | <p>Improve patient flow</p> |

| Diagnostic Services | | | | | |
|---|---|--|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>29. Initiative Radiographer role extension</p> <p>Location Heart of England Foundation Trust, UK</p> <p>Workforce Radiography</p> <p>Model Established practice</p> <p>Reference www.heft-radiology.co.uk</p> | <p>The radiology directorate supports a 4-tier career structure comprising:</p> <ul style="list-style-type: none"> • assistant practitioners • registered practitioners • advanced practitioners • consultant practitioners. <p>The appointment of qualified assistant practitioners has allowed the expansion of advanced practice amongst the radiographic staff.</p> <p>Advanced radiographers undertake activities previously undertaken by consultant radiologists, thus developing appropriate skill mix and maximising the opportunities of advanced practice across all sites.</p> <p>Advanced practice radiographers report on plain film images, CT scans, magnetic resonance imaging (MRI) scans and fluoroscopy examination (e.g. barium swallows).</p> | <p>Released radiographers' time.</p> <p>Increased access to services.</p> <p>Consistently deliver national targets of 5-week wait time for all examinations.</p> | ✓ | ✓ | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |
| <p>30. Initiative Sonographers performing hysterosalpingo-contrast ultrasound procedures</p> <p>Location Hull Women's and Children's Hospital, UK</p> <p>Workforce Sonography</p> <p>Model Established practice</p> <p>Reference NHS Modernisation Agency. (2004). <i>Ultrasound service improvement: An indepth look at the impact and benefits for patients and staff – A collection of local case studies</i>, www.improvement.nhs.uk/diagnostics</p> | <p>Sonographers trained to perform hysterosalpingo-contrast ultrasound procedures.</p> | <p>Waiting list reduced to close to zero.</p> <p>Proficiency of sonographers provides a comfortable examination for the patient in a calm environment.</p> <p>No anaesthesia risk encountered.</p> <p>Procedure directs pathway for fertility treatment.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |
| <p>31. Initiative Sonographers performing transrectal ultrasound (TRUS) and biopsy</p> <p>Location Multiple sites across UK</p> <p>Workforce Sonography</p> <p>Model Established practice</p> <p>Reference NHS Modernisation Agency, (2004). <i>Ultrasound service improvement: An indepth look at the impact and benefits for patients and staff – A collection of local case studies</i>, www.improvement.nhs.uk/diagnostics</p> | <p>Sonographers trained to perform TRUS and TRUS biopsy.</p> | <p>No difference in positive pick up rate, complication rate or re-biopsy between sonographers and radiologists.</p> <p>Wait time decreased from 13 weeks to one week with sonographers performing procedures.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |

| Emergency Department | | | | | |
|--|---|--|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>32. Initiative Allied health in the emergency department</p> <p>Location Mackay Hospital, Mackay Hospital and Health Service, Queensland</p> <p>Workforce Occupational therapy Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>The <i>Calderdale Framework</i> was used as a workforce redesign tool to train occupational therapists and physiotherapists to skill-share each other's clinical tasks for non-complex clients (older people with functional decline) and additionally trained in social work, speech pathology, dietetics and podiatry tasks.</p> | <p>Professional skill-sharing between occupational therapists and physiotherapists was equivalent in outcome to uni-professional intervention, in a cohort of community dwelling older people experiencing functional decline.</p> <p>Patients preferred a model where care was provided by one, as opposed to multiple, allied health clinicians.</p> | | ✓ | <p>Improve patient flow</p> <p>National Emergency Access Target (NEAT)</p> |
| <p>33. Initiative Allied health rural generalist clinical leader in the emergency department</p> <p>Location Warwick Hospital Darling Downs Hospital and Health Service, Queensland</p> <p>Workforce Physiotherapy Occupational therapy Speech pathology Nutrition and dietetics Podiatry Social work</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>The allied health clinical lead was trained in a range of allied health assessments and interventions as guided by a professional skill-sharing framework (i.e. <i>Calderdale Framework</i>).</p> <p>Category 4 and 5 patients presenting to the emergency department were assessed and managed by the allied health clinical lead.</p> | <p>Reduced referrals from the emergency department/ outpatients to allied health outpatients.</p> <p>Reduced occasions of service in allied health outpatients.</p> <p>Improved ability to meet best practice guidelines for conditions such as falls and stroke in the emergency department.</p> <p>Patients perceived that the integration of the service improved their experience and outcome.</p> | | ✓ | <p>NEAT</p> <p>Reduce outpatient department waiting time</p> |
| <p>34. Initiative Physiotherapy in the emergency department</p> <p>Location Cairns Hospital Cairns and Hinterland Hospital and Health Service, Queensland Robina Hospital, Gold Coast Hospital and Health Service, Queensland</p> <p>Workforce Physiotherapy</p> <p>Model Multi-centre study</p> <p>Reference Physiotherapy Department, Cairns Base Hospital and Gold Coast Hospital</p> | <p>As part of the <i>HWA Expanding the role of physiotherapist in emergency department</i>, category 3–5 patients presenting with an appropriate musculoskeletal injury/disorder are assessed, treated and discharged directly by the physiotherapist from triage.</p> <p>Tasks include fracture diagnosis, simple fracture management, joint relocation, sick certification, plastering, radiology referral and interpretation.</p> <p>The addition to the role of ordering of radiology, injecting of local anaesthetic and limited prescribing of analgesia is being explored.</p> | <p>Expected outcomes:</p> <ul style="list-style-type: none"> reduced time in emergency department released capacity/availability of medical officer and nursing resources for higher acuity patients (especially category 1–3). | | ✓ | NEAT |

| Emergency Department | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>35. Initiative Primary contact musculoskeletal physiotherapists in the emergency department</p> <p>Location Alfred Hospital, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists who completed training in radiology, pharmacology and specific tasks (e.g. plastering) managed patients allocated to fast-track in the emergency department.</p> | <p>Consistent improvement in 4-hour waiting time for non-admitted patients.</p> <p>Patients with back pain seen by physiotherapists were 14.5 times less likely to be admitted.</p> <p>Released capacity of medical staff to manage other patients.</p> | | ✓ | NEAT |
| <p>36. Initiative Radiographer abnormality description worksheet</p> <p>Location Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland</p> <p>Workforce Radiography</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Radiographers undertook a short course in image interpretation.</p> <p>Radiographers communicated their findings on plain film appendicular X-rays to emergency department clinicians using a standard radiographer abnormality description (RAD) worksheet.</p> | <p>High degree of radiographer image interpretation sensitivity and agreement with radiologist report.</p> <p>Completed RAD worksheets were provided to emergency department physicians within an average of 16 minutes—a clinically useful timeframe.</p> <p>RAD worksheets reduced the incidence of missed abnormalities in the emergency department setting.</p> | | | <p>Improve patient flow</p> <p>NEAT</p> |
| <p>37. Initiative Radiographer image interpretation of plain radiographs at the point-of-care in the trauma setting</p> <p>Location Multiple sites across Australia</p> <p>Workforce Radiography</p> <p>Model Multi-centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Multi-site trial of up-skilled radiographers providing written commentary (at time of presentation) on plain radiographic images for patients with musculoskeletal injuries attending the emergency department.</p> <p>Opinion then immediately available to referrer to inform decision-making.</p> <p>Aim to inform development of a national best practice model.</p> | <p>Expected outcomes:</p> <ul style="list-style-type: none"> remove need for radiologist to be available to provide reports at point-of-care for this patient cohort improved diagnostic accuracy at point-of-care reduced need for patients to re-present to the emergency department because of missed abnormalities. | | | <p>Improve patient flow</p> <p>NEAT</p> |

| Emergency Department | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>38. Initiative Soft tissue injury management by physiotherapists in emergency department</p> <p>Location University Hospitals Bristol NHS Foundation Trust, UK</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference McClellan, C. et al. (2012). A randomised trial comparing the clinical effectiveness of different emergency department healthcare professionals in soft tissue injury management. <i>BMJ Open</i>, 2: e001092</p> | <p>Adults presenting to the emergency department with peripheral soft tissue injury were randomly assigned to/and managed by physiotherapist, emergency nurse practitioner or doctor.</p> <p>Measures taken: upper and lower limb functional scores, quality of life, days off work.</p> | <p>All three groups had clinically equivalent outcomes.</p> | | | <p>Improve patient flow</p> <p>NEAT</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>39. Initiative Advanced practice physiotherapy for musculoskeletal disorders</p> <p>Location Review of global current practice</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Desmeules, F. et al. (2012). Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. <i>BMC Musculoskeletal Disorders</i>, 13:107</p> | <p>The advanced practice roles described varied depending on the clinical setting and country and included:</p> <ul style="list-style-type: none"> communicating a medical diagnosis triaging patients to be seen by physicians or specialists for consultation or surgery ordering of diagnostic tests (imaging or laboratory) conservative treatment recommendations that may include medication prescription and/or injection referral to other healthcare providers including other physiotherapists. | <p>Physiotherapists in advanced practice roles provided equal or better than usual care in comparison to physicians in terms of diagnostic accuracy, treatment effectiveness, use of healthcare resources, economic costs and patient satisfaction.</p> <p>Reduced cost of services.</p> <p>Enhanced patient outcomes.</p> | | ✓* | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |
| <p>40. Initiative Allied health in pain management</p> <p>Location Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland</p> <p>Workforce Psychology Occupational therapy Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Allied health professionals were involved in triage, initial assessment, case coordination, care planning and providing self management education for category 2 and 3 adults presenting with persistent non-malignant pain.</p> | <p>Outcome to date:</p> <ul style="list-style-type: none"> reduced assessment replication. <p>Expected outcome:</p> <ul style="list-style-type: none"> reduced outpatient waiting time. | | ✓ | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |
| <p>41. Initiative Allied health-led vestibular screening clinic</p> <p>Location Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland</p> <p>Workforce Audiology Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Category 2 and 3 ENT waiting lists are audited and screened by audiologist and physiotherapist for targeted patients reporting vestibular symptoms:</p> <ul style="list-style-type: none"> assessments and treatments conducted as required referrals to the audiology department and other relevant health professionals on completion of rehabilitation patient discharged back to the care of the ENT director and the referring doctor—usually the general practitioner (GP). | <p>Achieved clinically effective assessment and treatment of patients referred with dizziness.</p> <p>Expected outcomes:</p> <ul style="list-style-type: none"> reduction in waiting list reduction in falls. | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>42. Initiative Allied health practitioner ENT services</p> <p>Location Logan Hospital, Metro South Hospital and Health Service, Queensland</p> <p>Workforce Audiology Speech pathology</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Adult patients referred for non-complex hearing, balance, or tinnitus will be seen in an adult audiology allied health professional clinic.</p> <p>Adult patients referred for non-complex routine voice and swallowing disorders will be seen in an adult speech pathology allied health professional clinic.</p> <p>Children referred for non-complex glue ear or routine middle ear disease will be seen in a paediatric audiology allied health professional clinic.</p> <p>All allied health professional clinics will be conducted under on-site ENT consultant supervision.</p> | <p>Expected outcomes:</p> <ul style="list-style-type: none"> reduced waiting times for adult and paediatric patients eligible for the ENT allied health professional service a reduction in paediatric ENT waiting lists. | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Provide better health care to children</p> |
| <p>43. Initiative Physiotherapist assessment of spinal pain using Telehealth</p> <p>Location Sir Charles Gairdner Hospital, Western Australia</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.hwainventory.net.au</p> | <p>Initial assessment of patients in regional areas referred to neurosurgery clinic with spinal pain is done by telehealth, with assistance from a regional physiotherapist performing the examination in real time.</p> <p>Patients come to Perth and see the surgeon the same day as their imaging is performed.</p> <p>Sustained for the past three years.</p> | <p>Reduced costs for travel.</p> <p>Reduced patient stress.</p> | | | <p>Improve health services for regional, rural and remote communities</p> <p>Improve patient flow</p> |
| <p>44. Initiative Audiologist-led triage clinic</p> <p>Location Royal National Throat, Nose and Ear Hospital, UK</p> <p>Workforce Audiology</p> <p>Model Single centre study</p> <p>Reference NHS Improvement. (2010). <i>Pushing the boundaries – Evidence to support the development and implementation of good practice in Audiology 2010</i>. www.improvement.nhs.uk/audiology</p> | <p>Audiology team reviewed patients on the waiting list for ENT to determine the number of suitable referrals (i.e. did not meet any 'red flag criteria' indicating referral to ENT), and made decisions regarding appropriate management.</p> | <p>Initial findings suggest that 75% of referrals did not meet 'red flag criteria' and could potentially be managed by the diagnostic audiology department in a direct access service.</p> <p>New model would potentially release approximately 45 outpatient appointments with ENT per week.</p> <p>In 95% of cases, audiologists and ENT were in agreement as to the referral pathway to audiology or ENT.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>45. Initiative Audiology-led direct referrals for asymmetrical hearing loss</p> <p>Location Doncaster Royal Infirmary, UK</p> <p>Workforce Audiology</p> <p>Model Single centre study</p> <p>Reference Wong, B. et al. (2012). Incidence of vestibular schwannoma and incidental findings on the magnetic resonance imaging and computed tomography scans of patients from a direct referral audiology clinic. <i>J of Laryngol Otol</i> 126: 658-662</p> | <p>Audiology-led direct referral to MRI/CT to screen for retrocochlear pathologies for asymmetrical sensorineural hearing loss in older patients.</p> <p>Patients referred from the direct referral audiology clinic had a low incidence of vestibular schwannoma detection.</p> | <p>Avoided more than 300 patients being needlessly added to the ENT clinic list.</p> | | ✓* | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>46. Initiative Audiology assessment prior to ENT triage</p> <p>Location Mater Health Services, Queensland</p> <p>Workforce Audiology</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Audiologists audited and assessed category 2 and 3 ENT referrals for hearing concerns including paediatric referrals <16 yrs of age and adult referrals 16 yrs+.</p> <p>Results were reviewed by an ENT and recommendations made.</p> | <p>Paediatric results:</p> <ul style="list-style-type: none"> • 100 children were assessed • 50% hearing within normal limits • 38% discharged and removed from ENT waiting list • 12% offered an ENT appointment (upgraded to category 1) 50% remained on ENT waiting list • 6/120 sought private ENT opinion. <p>Adult results:</p> <ul style="list-style-type: none"> • 24 patients assessed • 18% discharged from ENT waiting list • 52% remained on ENT waiting list • 30% offered ENT appointment (upgraded to category 1) • 0/28 sought a private ENT opinion. | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>47. Initiative Audiology review post-grommets</p> <p>Location Royal Cornwall Hospital, Truro, UK</p> <p>Workforce Audiology</p> <p>Model Established practice</p> <p>Reference Davies-Husband, C. et al (2012). Post-surgical tympanostomy tube follow up with audiology: experience at the Freeman Hospital. <i>J of Laryngology and Otology</i>, 126: 142-146</p> | <p>An audiologist provides 6-week post-grommets follow up:</p> <ul style="list-style-type: none"> • discharge if normal • refer to ENT outpatients if complication. | <p>A 54% reduction in patients followed up by an otolaryngologist.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Provide better health care to children</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>48. Initiative Cardiology outpatient department (OPD) test referral triage</p> <p>Location Logan Hospital, Metro South Hospital and Health Service, Queensland</p> <p>Workforce Cardiac science</p> <p>Model Single centre study</p> <p>Reference Clinical measurement departmental statistics, Logan Hospital</p> | <p>The senior cardiac scientist triaged referrals to cardiac OPD to determine whether the diagnostic testing requested (according to referral type) was appropriate or needed to be amended.</p> <p>In some cases the senior cardiac scientist was entrusted with making the decision on what alternate test to perform if the original test wasn't suitable.</p> <p>To date there have been no known adverse effects to patients with this initiative.</p> | <p>Category 1 referrals for a cardiology OPD appointment reduced from greater than 90 days to within 30 days.</p> <p>Category 2 referrals mostly reduced from six months or more to within 60 days.</p> <p>Significantly fewer patients arriving for a test only to find out test was unsuitable therefore requiring rebooking.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>49. Initiative Clinical specialist radiation therapist sustainability project</p> <p>Location Multiple sites across Ontario, Canada</p> <p>Workforce Radiation therapy</p> <p>Model Established practice</p> <p>Reference www.cancercares.on.ca</p> | <p>Palliative clinical specialist radiation therapist (CSRT), metastatic bone cancer CSRT, head and neck cancer CSRT positions perform tasks delegated from radiation oncologists including:</p> <ul style="list-style-type: none"> • assessment and triage • ordering tests and analysing results • designing care plans • treatment planning and prescribing medication (limited formulary). | <p>Increased access for new patients.</p> <p>Reduced patient wait time.</p> <p>Improved patient satisfaction.</p> <p>Released radiation oncologist time for more complex patients.</p> | | ✓ | Improve patient flow |
| <p>50. Initiative Congenital talipes equinovarus and developmental dysplasia of the hip management by physiotherapist</p> <p>Location Alice Springs Hospital, Northern Territory</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Physiotherapy Department, Alice Springs Hospital</p> | <p>A physiotherapist performs the plastering and bracing required by babies with congenital talipes equinovarus and developmental dysplasia of the hip.</p> <p>The paediatric orthopaedic team from Adelaide review the patients once every three months.</p> <p>The physiotherapist is responsible for the full management and referral to orthopaedics.</p> | <p>Improved patient flow.</p> <p>Reduced waiting time.</p> <p>Reduced the need to fly all paediatric orthopaedic patients to Adelaide for specialist services.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Provide better health care to children</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>51. Initiative Credentialed diabetes educators</p> <p>Location Australia wide</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Australian Diabetes Educators Association (2007). <i>The Credentialed Diabetes Educator in Australia – Role and Scope of Practice</i>, www.adea.com.au</p> | <p>Dietitians who are credentialed diabetes educators can:</p> <ul style="list-style-type: none"> authorise registrations on the National Diabetes Services Scheme (NDSS) authorise NDSS registration to access insulin pump consumables. | <p>Reduce outpatient department waiting time.</p> <p>Increase access to diabetes services.</p> | | ✓ | <p>Reduce patient waiting times.</p> <p>Improve patient flow</p> |
| <p>52. Initiative Dietitian as first contact in gastroenterology clinics</p> <p>Location Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland</p> <p>Workforce Nutrition and dietetics</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Dietetic-led screening clinic for gastroenterology referrals to the category 2 and 3 surgical outpatient clinic meeting specified criteria.</p> <p>Independently request and interpret relevant pathology and diagnostic tests under the jurisdiction of the surgical consultant.</p> <p>Refer to the surgical team for opinion or review/discharge back to community-based services.</p> | <p>Reduced wait times for patients (up to 283 days).</p> <p>Potential for 5% reduction of gastroenterology outpatient wait lists.</p> <p>Fewer appointments required with gastroenterology consultants—opportunity cost savings.</p> <p>Patients and staff satisfied with service. Model of care to continue.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>53. Initiative Dietitian in adult gastroenterology clinic</p> <p>Location Multiple sites across, UK</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Lomer M. (2009). The role of a consultant dietitian in gastroenterology in the UK. <i>Nutrition Today</i>, 44:174-9</p> | <p>Specialist dietitian recruited to gastroenterology clinic</p> <ul style="list-style-type: none"> assess new patient referrals for altered bowel habits, requests investigations and discusses findings with gastroenterologist. | <p>Gastroenterologist time freed for endoscopic procedures.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>54. Initiative Dietitian in renal clinic</p> <p>Location Multiple sites across USA</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Brommage, D. et al. (2009). American Dietetic Association and the National Kidney Foundation Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Nephrology Care. <i>Journal of Renal Nutrition</i>, 19:345-356</p> | <p>Dietitian-led management of bone disease in renal patients involving ordering of appropriate biochemical tests to evaluate renal function; and prescribing and adjustment of vitamin D and phosphate binders.</p> <p>Management of anaemia in renal patients—ordering of haemoglobin and full blood count.</p> <p>Prescribing of erythropoietin analogue (EPO); iron infusion.</p> <p>Fluid assessment and advising on weighing for fluid balance.</p> | <p>Decreases the workload of doctors and renal physicians.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>55. Initiative Dietitian management of outpatient enteral feeding</p> <p>Location Multiple sites across UK</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Lomer, M. (2009). The role of a consultant dietitian in gastroenterology in the UK. <i>Nutrition Today</i>, 44:174-9</p> | <p>Dietitian involved in enteral feeding in outpatient and community settings routinely checks percutaneous endoscopic gastrostomy (PEG) site at each consultation to check for signs of redness, ooze and infection and reports to relevant staff (e.g. GP or nurses) to initiate early treatment if needed.</p> | <p>Early identification of potential wounds and infections reduces treatment duration and potentially prevents hospital admission.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>56. Initiative Direct listing for total hip replacement by primary care physiotherapists</p> <p>Location Northern Devon Healthcare NHS Trust, UK</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Parfitt, N. et al. (2012). Direct listing for total hip replacement (THR) by primary care physiotherapists. <i>Clinical Governance: an International Journal</i>, 17:210-6</p> | <p>Primary care-based extended scope physiotherapist-led service places patients directly onto surgical wait list of secondary care orthopaedic surgeons.</p> | <p>Over a 2-year period, 130 referrals for direct listing were made and 98% required total hip replacement.</p> <p>Patients did not require orthopaedic outpatient appointment until pre-assessment clinic.</p> <p>Approximate saving of £145 per patient.</p> | | ✓* | <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>57. Initiative Dose adjustment for normal eating by dietitians</p> <p>Location Australia wide</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference www.dafne.org.au</p> | <p>Dietitians and diabetes educators (with appropriate post-graduate training and experience) support adults with type 1 diabetes to adjust insulin dose.</p> | <p>Improved quality of life and improvement in clinical indicators.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |
| <p>58. Initiative ENT audiology component</p> <p>Location Royal Children's Hospital, Children's Health Queensland</p> <p>Workforce Audiology</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Audiology offers a hearing assessment to all children with hearing or ear-related concerns on ENT waiting list in order to clinically assess and escalate those requiring urgent ENT attention.</p> <p>Children with normal hearing and no other ENT concerns are discharged, with appropriate documentation from director of ENT back to referral source.</p> <p>Retrospective review of all previously assessed children still on wait list with normal hearing—for discharge as above.</p> <p>Joint triaging of all referrals by audiologist and director of ENT ensures clinical consistency.</p> <p>Audiology assessments are offered at time of referral as part of triage process—clinical category initially assigned to child reviewed based on audiology findings.</p> | <p>As at 7 March 2013, 54.6% of children tested found to have normal hearing.</p> <p>Increased discharge rate of children removed from the waiting list (i.e. normal hearing and nil other ENT concerns) from 36% (pre-trial) to between 63–71% since the trial.</p> <p>Significant reduction in waiting list numbers and wait times.</p> <p>Timely identification and management of children with permanent hearing losses requiring hearing aids; at high clinical risk of complications arising from long-term middle ear dysfunction (e.g. cholesteatoma) and children with moderate or greater hearing losses requiring more urgent ENT intervention.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>59. Initiative Optometrist in diabetes care</p> <p>Location Ipswich Hospital, West Moreton Hospital and Health Service, Queensland</p> <p>Workforce Optometry</p> <p>Model Established practice</p> <p>Reference Chronic Conditions Service, Ipswich Community Health, West Moreton Hospital and Health Service</p> | <p>Diabetic patients referred to the hospital eye clinic for routine diabetes eye screening are provided with the option of staying on the waitlist or being seen by the local optometrist.</p> <p>Optometrists send a report to the client's GP and have an annual recall system. If required, the optometrist can refer to a public or private ophthalmologist.</p> <p>There is a high uptake of the option to see the local optometrist due to easy access.</p> | <p>Decreased hospital eye clinic waiting list numbers.</p> <p>Increased annual diabetes eye screening which meets evidence-based guidelines for diabetes care.</p> <p>Quality of referrals to the ophthalmologist improved.</p> <p>The role of the optometrist in diabetes care was promoted.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>60. Initiative Community forensic mental health outreach service</p> <p>Location Multiple sites across Queensland Hospital and Health Services</p> <p>Workforce Psychology Social work</p> <p>Model Established practice</p> <p>Reference www.health.qld.gov.au/forensicmentalhealth/</p> | <p>Psychologists and social workers (together with nurses and psychiatrists) provide targeted interventions to address problem behaviours identified in prior forensic assessment to reduce risk (e.g. sexual offending, stalking and violence).</p> <p>This community-based service is delivered by clinicians within the client's mental health treating team.</p> <p>The program has great potential to assist Hospital and Health Services to better address both the criminogenic and mental health treatment needs of people with mental illness who offend or who are at risk of offending.</p> | <p>Increased access for targeted client groups.</p> | | | <p>Support recovery from mental illness</p> |
| <p>61. Initiative General paediatrics allied health screening service</p> <p>Location Royal Children's Hospital Children's Health Queensland</p> <p>Workforce Psychology Speech pathology Occupational therapy Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.health.qld.gov.au</p> | <p>During a trial of allied health screening and brief intervention service to decrease waiting list in general paediatrics, 247 referrals were triaged out of general paediatrics into an allied health service.</p> <p>Phone triage was used to gather information and refer to the most appropriate service, including back to general paediatrics (13/230).</p> | <p>Reduced duplication of service.</p> <p>Timely access to more targeted services.</p> <p>Release medical specialist's time to see more complex cases.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>62. Initiative Occupational therapy-led hand therapy clinic</p> <p>Location Multiple sites across Scotland, UK</p> <p>Workforce Occupational therapy</p> <p>Model Established practice</p> <p>Reference The Scottish Government. (2011). <i>From strength to strength: celebrating 10 years of the allied health professions in Scotland.</i> www.scotland.gov.uk</p> | <p>Patients presenting with conditions such as trigger finger, carpal tunnel syndrome and Dupuytren's contracture are triaged into the occupational therapy-led treatment pathway which includes splinting, activity modification, expert advice and, where necessary, joint injection.</p> | <p>A significant number of patients are able to avoid undergoing surgery.</p> <p>Those who do require surgery receive follow-up through the postoperative occupational therapy pathway.</p> <p>Consistent referral management.</p> <p>Reduced waiting lists.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>63. Initiative Integrated employment program in mental health</p> <p>Location 12 Hospital and Health Services across Queensland</p> <p>Workforce Occupational therapy</p> <p>Model Multi centre study</p> <p>Reference The Prince Charles Hospital Integrated Employment program. Metro North Mental Health Service</p> | <p>An occupational therapist works with the employment consultant (located with the clinical team) to conduct specific work assessments and develop tailored intervention for successful employment of mental health consumers.</p> <p>The occupational therapist also leads the service-wide partnership team, consisting of service managers, disability employment network services and team leaders.</p> | <p>An evaluation of outcomes at The Prince Charles Hospital showed that 63% of mental health consumers who participated in the program gained competitive employment.</p> | | | <p>Support recovery from mental illness</p> |
| <p>64. Initiative Interprofessional eye clinic</p> <p>Location Royal Victorian Eye and Ear Hospital, Victoria</p> <p>Workforce Optometry</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>The Royal Victorian Eye and Ear Hospital (RVEEH) and Australian College of Optometry (ACO) implemented a pilot clinic to promote integrated care between ophthalmology and optometry. Relevant new patients referred by GP to RVEEH were diverted to the ACO. With clear pre-diagnostic work undertaken, patients could bypass the general eye clinic and be streamed directly into sub-speciality clinics such as glaucoma and medical retina.</p> | <p>Improved patient care.</p> <p>Greater access to clinical eye care.</p> <p>Reduced waiting times for new appointment.</p> <p>Greater use of the existing skilled eye health workforce.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>65. Initiative Lymphoedema therapy services</p> <p>Location The Townsville Hospital, Townsville Hospital and Health Service, Queensland</p> <p>Workforce Occupational therapy Physiotherapy</p> <p>Model Established practice</p> <p>Reference Occupational Therapy Department, The Townsville Hospital</p> | <p>There is a shared model of care between occupational therapy and physiotherapy lymphoedema services where both professions are responsible for complex decongestive treatment including compression bandaging and manual lymphatic drainage.</p> | <p>Reduced waiting time.</p> <p>Reduced unnecessary duplicated appointments.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>66. Initiative Multidisciplinary high-risk foot team</p> <p>Location Amputation Prevention Center, Los Angeles USA</p> <p>Workforce Podiatry</p> <p>Model Established practice</p> <p>Reference Rogers, L. et al (2010). Toe and flow: essential components and structure of the amputation prevention team. <i>JVascSurg</i>, 52:235-75</p> | <p>Conjoined model involving podiatry and vascular surgery—the 'toe and flow' model.</p> | <p>Reductions in major amputations and foot complications.</p> | | | <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>67. Initiative Multidisciplinary paediatric urinary incontinence clinic</p> <p>Location Mater Children’s Hospital, Queensland</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Mater Physiotherapy, Mater Health Services</p> | <p>All paediatric urinary incontinence referrals are triaged by consultant urologist and category 3 patients are referred to physiotherapist for conservative intervention.</p> <p>Patients referred to physiotherapy are discharged from specialist clinic wait list if conservative treatment is successful.</p> | <p>Intended outcomes:</p> <ul style="list-style-type: none"> patients receive the right service in the most time efficient way free up specialist clinics for medical/surgical candidates. | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>68. Initiative Multidisciplinary referral pathway for female urinary incontinence</p> <p>Location Mater Mothers’ Hospital, Mater Adult Hospital, Queensland</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Physiotherapy Services at Mater Adult Hospital</p> | <p>All female urinary incontinence referrals are screened by a surgeon.</p> <p>Patients are initially offered three months of conservative physiotherapy treatment (including urodynamics) before medical or surgical intervention.</p> <p>Urodynamic studies are reserved for appropriate patients (i.e. following failure to respond to conservative management but prior to surgical intervention).</p> <p>Patients are discharged from urodynamic and surgical wait list on completion of successful conservative physiotherapy intervention.</p> | <p>In 2012:</p> <ul style="list-style-type: none"> patients referred with female urinary incontinence—260 patients treated by physiotherapy intervention only—120 number of patients referred for urodynamic studies from this pathway—140 patients treated by surgical intervention—52. | | | <p>Improve patient flow</p> |
| <p>69. Initiative Multidisciplinary triage model in persistent pain service</p> <p>Location Austin Hospital, Victoria</p> <p>Workforce Psychology Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists applied pre-appointment management tools to more accurately triage written referrals.</p> <p>Direct access to physiotherapy and psychology pain services if appropriate.</p> | <p>A 32% reduction in acceptance of inappropriate referrals.</p> <p>A three week interval between referral and communication of triage decision to patient and GP.</p> <p>A 25% increase in new appointments for accepted patients.</p> <p>An 8% reduction in missed first appointment.</p> <p>A 6% increase in patients managed by physiotherapy and psychology without pain physician.</p> <p>Removal of triaging responsibilities for physician, allowing more clinical time.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Increase patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>70. Initiative Musculoskeletal interface service</p> <p>Location Orthopaedic Choice, Hampshire Primary Care Trust, UK</p> <p>Workforce Physiotherapy Podiatry Occupational therapy</p> <p>Model Established practice</p> <p>Reference NHS Institute for Innovation and Improvement. (2009). <i>Focus on: Musculoskeletal Interface Services</i> (p13), www.institute.nhs.uk/msk</p> | <p>A community-based, multi-professional team provides an alternative referral to GPs—brief consultation with physiotherapist, podiatrist and occupational therapist and ready access to an on-site specialist for opinion when required.</p> <p>All patients who require surgical intervention are assessed for fitness for surgery prior to onward referral to a choice of providers.</p> <p>The consultant presence facilitates ongoing staff development and training.</p> | <p>Reduced waiting time.</p> <p>Early access to diagnostics.</p> <p>Patients receive appropriate treatment closer to their homes.</p> <p>Reduced referrals to acute secondary care.</p> <p>Reduced surgical procedures per 100 population.</p> | | ✓ | Reduce outpatient department waiting time |
| <p>71. Initiative Physiotherapy musculoskeletal pathway with prescribing</p> <p>Location Gold Coast Hospital and Health Service, Queensland</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Research project investigating prescribing and/or injecting by physiotherapist clinical leader in the orthopaedic physiotherapy screening clinic setting.</p> <p>Appropriately trained allied health professionals being able to (and accepted by others as able to) autonomously manage non-surgical musculoskeletal care, including medicines.</p> | <p>Legislative approval under the Health (Drugs and Poisons) Regulation 1996, for a physiotherapist to prescribe within the research trial.</p> <p>Integration of new extended scope practice into services including requesting of ultrasound-guided corticosteroid and local anaesthetic injections and blood tests.</p> <p>Expected outcome:</p> <ul style="list-style-type: none"> reduced wait time for access to musculoskeletal services. | | ✓* | Improve patient flow Reduce outpatient department waiting time |
| <p>72. Initiative Multidisciplinary musculoskeletal triage</p> <p>Location Kingston Hospital NHS Trust, UK</p> <p>Workforce Multidisciplinary</p> <p>Model Single centre study</p> <p>Reference NHS Institute for Innovation and Improvement. (2009). <i>Focus on: Musculoskeletal Interface Services</i> (p13) www.institute.nhs.uk/msk</p> | <p>Allied health practitioners triage, assess (including the organisation of relevant diagnostic tests) and arrange onward management for a variety of orthopaedic conditions.</p> | <p>Reduced waiting times for carpal tunnel decompression from up to 76 weeks to 4 weeks.</p> <p>Shorter waits to see allied health practitioners compared to consultants.</p> <p>Flexibility of staff mix within the service.</p> <p>Fewer follow-ups.</p> | | ✓ | Improve patient flow |

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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>73. Initiative Neurosurgical physiotherapy post-operative review clinic</p> <p>Location The Alfred Hospital , Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.alfredhealth.org.au/physiotherapy/</p> | <p>Experienced musculoskeletal physiotherapists conduct the routine 6-week post-operative review of patients following uncomplicated neurosurgical procedures such as laminectomy and discectomy instead of the orthopaedic surgeon.</p> | <p>Decreased waiting times for post-operative review appointments.</p> <p>Decreased waiting time on the day of appointment.</p> <p>Increased patient satisfaction and experience.</p> <p>Increased capacity for neurosurgeons to see new patients.</p> <p>Increased education and access to rehabilitation/advice for patients.</p> | | ✓ | Reduce outpatient department waiting time |
| <p>74. Initiative Neurosurgery outpatient screening clinic</p> <p>Location Northern Health, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists provided screening assessment for patients with back and neck pain on the neurosurgical wait list.</p> <p>Conservative management arranged as appropriate.</p> <p>Patients requiring consultant review were referred to the neurosurgery clinic.</p> | <p>Reduced demand on neurosurgery outpatient clinic.</p> <p>Effective use of neurosurgical consultants' time.</p> | | | Reduce outpatient department waiting time |
| <p>75. Initiative Neurosurgical physiotherapy screening clinics (NPSC)</p> <p>Location Princess Alexandra Hospital, Gold Coast Hospital, Royal Brisbane and Women's Hospital, Townsville Hospital, Queensland</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Service delivery models, patient flow, Health Systems Innovation Branch, Department of Health, Queensland</p> | <p>Selected category 2 and 3 patients referred to specialist outpatients (neurosurgery) are screened by a physiotherapist who undertakes assessment, further investigation as required and differential diagnosis.</p> <p>Patients with non-musculoskeletal conditions or for whom surgical management is indicated are re-prioritised or returned to wait list.</p> <p>Appropriate patients are offered tailored multidisciplinary non-surgical management.</p> <p>Patients are discharged from specialist outpatient wait list if non-surgical treatment successful or further medical consultant review not indicated.</p> <p>In 2011–12, 901 new cases seen statewide in neurosurgical physiotherapy screening clinics.</p> | <p>Statewide:</p> <ul style="list-style-type: none"> 65% of patients screened in neurosurgical physiotherapy screening clinics provided with multidisciplinary non surgical management 66% of patients discharged in 2011–12 were removed from specialist outpatients wait list without requiring medical consultant review of those patients requiring further medical consultant review, 25% were identified as requiring more urgent review than originally categorised, demonstrating an effective safety net for patients with previously unidentified significant or non-musculoskeletal pathology better prepared for surgery where patient proceeds to surgery. | | | Improve patient flow |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>76. Initiative Non-medical prescribing</p> <p>Location Multiple sites across Scotland, UK</p> <p>Workforce Physiotherapy Podiatry Radiation therapy</p> <p>Model Established practice</p> <p>Reference The Scottish Government. (2011). <i>From strength to strength: Celebrating 10 years of the Allied Health profession in Scotland</i>, www.scotland.gov.uk</p> | <p>In diabetes services, podiatrists prescribe antibiotics for foot ulcers and change insulin doses.</p> <p>In rheumatology services, physiotherapists and podiatrists provide joint injection therapy and change doses of steroids.</p> <p>In orthopaedic services, physiotherapists prescribe analgesics and anti-inflammatory medicines.</p> <p>In radiotherapy for treatment of cancer, radiation therapists prescribe antiemetic medicines for patients suffering from nausea.</p> | <p>Quicker access to antibiotics for patients presenting with infections, especially for patients with diabetes.</p> <p>Quicker and direct access to other medicines that patients need.</p> <p>Improved patient journey, as all patient health needs are managed by the allied health professional with no need for referral to another service or practitioner.</p> <p>Reduction in waste of dressings, as the allied health practitioner is the main prescriber.</p> <p>Releasing time in general practices as patients are not required to make additional appointments to access specific medicines.</p> <p>Increasing pain management options through prescribing.</p> | | ✓* | Improve patient flow |
| <p>77. Initiative Arthroplasty management by physiotherapists</p> <p>Location Northern Health, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists in primary contact capacity carried out post-surgical outpatient reviews following hip and knee replacement, as an alternative to orthopaedic reviews.</p> <p>Evaluated recovery with respect to desired outcomes and facilitated appropriate referral for rehabilitation.</p> | <p>Improved outpatient access and flow.</p> <p>Reduced demand on orthopaedic consultant workforce.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>78. Initiative Occupational therapist in hand clinic</p> <p>Location Guy's and St Thomas NHS Foundation Trust, London, UK</p> <p>Workforce Occupational therapy</p> <p>Model Single centre study</p> <p>Reference Rose R. et al. (2009). Development and implementation of a hand therapy extended scope practitioner clinic to support the 18-week waiting list initiative. <i>Hand Therapy</i>, 14: 95-104</p> | <p>Occupational therapy-led clinic for selected hand condition referrals.</p> <p>Role is autonomous and includes referral for blood tests, X-rays, electromyography, dynamic ultrasound and MRI.</p> <p>Occupational therapists obtain first-line consent for specified elective hand surgery procedures.</p> | <p>Improved the patient pathway by providing earlier access to a specialist opinion for a diagnosis and management of hand conditions.</p> <p>Reduced waiting times to the first appointment where diagnosis can be confirmed and treatment can be provided.</p> <p>Occupational therapists effectively diagnosed and managed GP referrals for carpal tunnel syndrome and first carpometacarpal osteoarthritis without increasing the demand for surgical opinion or procedures. Also effective in diagnosing other conditions such as early-onset Dupuytren's disease, de Quervain's disease, ganglions and trigger finger.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>79. Initiative Occupational therapy vascular clinic</p> <p>Location Cairns Base Hospital, Cairns and Hinterland Hospital and Health Service, Queensland</p> <p>Workforce Occupational therapy</p> <p>Model Single centre study</p> <p>Reference Occupational Therapy Department, Cairns Base Hospital</p> | <p>Occupational therapists measure brachial pressure index readings using doppler.</p> <p>Wound management (limited to wounds of 10 cent piece size).</p> <p>Negative pressure wound therapy which builds on the wound management process.</p> | <p>Improved efficiency of service</p> <p>Decreased patient wait times between clinicians.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>80. Initiative Orthopaedic physiotherapy screening clinic (OPSC)</p> <p>Location Multiple sites across Queensland Hospital and Health Services</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Service delivery models, patient flow Health Systems Innovation Branch, Department of Health, Queensland</p> | <p>Screening process to manage patients with musculoskeletal conditions referred by GPs for orthopaedic opinion but unlikely to require surgical management.</p> <p>Selected patients re-directed to the OPSC where musculoskeletal physiotherapists undertake assessment, diagnosis and case management.</p> <p>Non-operative care provided by multidisciplinary allied health team.</p> <p>Stakeholder satisfaction survey outcomes ‘highly satisfactory’ across all indicators.</p> | <p>Statewide outcomes:</p> <ul style="list-style-type: none"> • 4431 new cases seen in 2011–12 • 72% of patients screened provided with multi-disciplinary non-surgical management • of those patients requiring further medical consultant review, 32% were identified as requiring more urgent review than originally categorised, demonstrating an effective safety net for patients with previously unidentified significant or non-musculoskeletal pathology • clinical outcome measures statistically significant across all measures • wait time reduced (e.g. at Cairns Hospital, in the month of February 2013, the time to initial consultation in OPSC for category 2 and 3 patients was 75 and 90 days respectively. Whereas for initial orthopaedic consultation the waiting time for category 2 and 3 patients was 193 and 433 days respectively). | | | Reduce outpatient department waiting time |
| <p>81. Initiative Physiotherapy orthopaedic screening clinics</p> <p>Location The Alfred Hospital, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists triaged patients referred to the osteoarthritis hip and knee service to determine the need for surgical or conservative intervention with 6-monthly monitoring.</p> <p>Patients were fast-tracked for surgical consult as appropriate.</p> | <p>Reduced waiting time from 18 months to 3 months.</p> <p>40% of patients seen by physiotherapist fast-tracked to surgeon, with imaging to facilitate consultation.</p> <p>Most patients seen by physiotherapist managed conservatively and discharged without having to see a surgeon.</p> <p>Freed up surgeons’ consultation time.</p> | | | Reduce outpatient department waiting time |

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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>82. Initiative Physiotherapy orthopaedic outpatient screening clinic</p> <p>Location Northern Health, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists screened patients on orthopaedic wait list with shoulder and knee pain.</p> <p>Conservative management arranged as appropriate.</p> <p>Referred to orthopaedic clinic as required.</p> | <p>Decreased wait times for orthopaedic clinic.</p> <p>Approximately 78% of screening clinic patients managed entirely by physiotherapists and do not require orthopaedic review.</p> <p>More than 85% referred to consultant go on to have orthopaedic surgery/intervention.</p> <p>Reduced demand on orthopaedic consultants.</p> | | | Reduce outpatient department waiting time |
| <p>83. Initiative Orthopaedic podiatry triage clinic</p> <p>Location Logan Hospital, Ipswich Hospital, Townsville Hospital, Queensland</p> <p>Workforce Podiatry</p> <p>Model Multi-centre study</p> <p>Reference www.health.qld.gov.au</p> <p>Homeing L. (2012). Orthopaedic podiatry triage: process outcomes of a skill mix initiative. <i>Australian Health Review</i>, 36:457-60</p> | <p>Podiatrists screened non-urgent patients (on foot and ankle surgery waiting lists) to determine those suitable for conservative podiatric treatment.</p> <p>Patients successfully treated were discharged from surgical waiting list.</p> | <p>Orthopaedic foot and ankle waiting list reduced by between 23–50%.</p> <p>Increased conversion to surgery rates—orthopaedic surgeon sees patients who want and need surgery.</p> <p>Improved foot health outcomes for patients who have been screened and treated by the podiatrist.</p> | | | Reduce outpatient department waiting time Improve patient flow |
| <p>84. Initiative Physiotherapy-led osteoarthritis hip and knee services</p> <p>Location 14 sites across Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.health.vic.gov.au/oahks/</p> | <p>Physiotherapists assess patient's severity of disease, initiate appropriate conservative management and refer to surgeon and fast-track as appropriate.</p> | <p>Statewide outcomes:</p> <ul style="list-style-type: none"> • more appropriate use of specialist orthopaedic services • patient satisfaction with the service and the care received. | | | Improve patient flow |
| <p>85. Initiative Osteoarthritis hip and knee physiotherapy service</p> <p>Location Northern Health, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists screened osteoarthritic hip and knee referrals from an orthopaedic waitlist.</p> <p>Conservative management as appropriate.</p> <p>Referral for orthopaedic consultant assessment.</p> <p>Prioritisation on need, not chronology.</p> | <p>Reduced wait time for surgical assessment.</p> <p>Increased conversion rate to surgery for arthroplasty from initial orthopaedic assessment (approximately 70%).</p> <p>Reduced wait for orthopaedic assessment from GP referral (down from 2.5 years to 2–6 months).</p> <p>Effective use of consultant time.</p> | | | Reduce outpatient department waiting time |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>86. Initiative Multidisciplinary triage in persistent pain management service</p> <p>Location Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland</p> <p>Workforce Psychology</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Multidisciplinary triage was overseen by an allied health professional who conducted an assessment prior to the patients' appointment with the senior medical officer (SMO) and provided a clinical handover.</p> | <p>96.7% of patients are triaged within five working days, compared with previous rate of 66.7%.</p> <p>Substantially reduced waitlists.</p> <p>Waitlist 100% within key performance indicator timeframe for each category.</p> <p>A saving of at least five hours per week of SMO face-to-face patient time, in addition to SMO time previously spent writing assessment reports.</p> <p>Increased weighted activity unit-related revenue through increased numbers of patients seen and increased ratio of new to review patients.</p> | | | Reduce outpatient department waiting time |
| <p>87. Initiative Pharmacist anticoagulant dosing service</p> <p>Location Alfred Health, Victoria</p> <p>Workforce Pharmacy</p> <p>Model Single centre study</p> <p>Reference Dooley, M. et al. (2011). Successful implementation of a pharmacist anticoagulant dosing service in ambulatory care. <i>J Pharmacy Practice and Research</i>, 41:208-11</p> | <p>Patients admitted to hospital in the home service for anticoagulation enrolled in pharmacist dosing service.</p> | <p>Reduced number of days to stabilisation.</p> <p>Comparable mean number of international normalised ratios measured.</p> | | ✓* | Improved patient flow |
| <p>88. Initiative Pharmacist prescribing in an HIV clinic</p> <p>Location Gold Coast Sexual Health Clinic Gold Coast Hospital and Health Service, Queensland</p> <p>Workforce Pharmacy</p> <p>Model Single centre study</p> <p>Reference www.uq.edu.au/safeprescribing/documents/gold_coast_pilot.pdf</p> | <p>A Gold Coast sexual health clinic is using the prescribing expertise of a HIV specialist pharmacist working in collaboration with clinical specialists.</p> | <p>Expected outcome:</p> <ul style="list-style-type: none"> • release medical officer time for more complex cases • reduce waiting time. | | ✓ | Reduce outpatient department waiting time |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>89. Initiative Pharmacy-led pain management clinic</p> <p>Location Lovelace Medical Group, Albuquerque, New Mexico, USA</p> <p>Workforce Pharmacy</p> <p>Model Established practice</p> <p>Reference Dole, E. et al. (2007). Provision of pain management by a pharmacist with prescribing authority. <i>American Journal of Health-System Pharmacy</i> 64:85-9</p> | <p>A pharmacist responsible for medication management in a clinic where 90% of the patient population is treated for chronic non-cancer-related pain.</p> <p>These services are billable under New Mexico law.</p> | <p>Consistent decrease in mean visual analog scale scores for pain with continued visits.</p> <p>Clinic generated revenue.</p> | | ✓ | Reduce outpatient department waiting time |
| <p>90. Initiative Pharmacy-run anticoagulation clinics</p> <p>Location University of Alberta Hospital, Canada</p> <p>Workforce Pharmacy</p> <p>Model Established practice</p> <p>Reference Bungard, T. et al. (2009). Evaluation of a pharmacist-managed anticoagulation clinic: Improving patient care. <i>Open Med</i>, 2009; 3:e16–21</p> | <p>Clinic initiated in 2001 as a pilot project and is unique in the Canadian setting, as all direct patient care is provided by pharmacists who have an extended scope of practice and who work in consultation with specialist physicians.</p> | <p>Significantly better international normalised ratio control and reduced rates of thromboembolic complications compared with standard care.</p> <p>Resource use was substantially reduced.</p> | | ✓* | Improve patient flow |
| <p>91. Initiative Phenol block and botox injections by physiotherapists</p> <p>Location Glasgow, Scotland, UK</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Royal College of Physicians, British Society of Rehabilitation Medicine, Chartered Society of Physiotherapy, Association of Chartered Physiotherapists Interested in Neurology (2009). <i>Spasticity in adults: management using botulinum toxin. National guidelines.</i> www.rcplondon.ac.uk/sites/default/files/documents/spasticity-in-adults-management-botulinum-toxin.pdf</p> | <p>Phenol block and botox injections are performed by physiotherapists in a spasticity clinic.</p> <p>Physiotherapists administer botox under direction in conjunction with a physiotherapy program for spasticity.</p> | <p>Improved patient flow.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improved patient flow</p> |

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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>92. Initiative Phosphate binder adjustment by dietitians</p> <p>Location University Hospitals of Leicester, NHS Trust, UK</p> <p>Workforce Nutrition and dietetics</p> <p>Model Established practice</p> <p>Reference Ruddock, N. (2010). Changing clinical practice can lead to significant improvement in control of serum phosphate in a large haemodialysis population. Abstract o61, www.britishrenal.org</p> | <p>A collection of interventions were introduced to improve phosphate control including the introduction of extended roles for dietitians to allow them to address medication changes when necessary.</p> | <p>Prevent delays in treatment change.</p> <p>Over two years:</p> <ul style="list-style-type: none"> mean serum phosphate fell from 1.62 ± 0.52mmol/l to 1.47 ± 0.40mmol/l ($p=0.01$) the proportion of patients with serum phosphate >1.8mmol/l fell significantly from 30.6% to 16.8% ($p=0.009$) the proportion of patients achieving the Renal Association standard of $1.1 - 1.8$mmol/l increased from 53.6% to 62.9% ($p=0.24$). | | | Improve patient flow |
| <p>93. Initiative Physiotherapist-led ankylosing spondylitis clinic</p> <p>Location East Kent Hospital University Foundation Trust, Canterbury, UK</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Van Rossen, L. et al. (2012). Improving the standard of care for people with ankylosing spondylitis and a new approach to developing ESP-led AS clinics. <i>Musculoskeletal Care</i>, 10:171-7</p> | <p>Physiotherapist-led specialist clinic for ankylosing spondylitis assessment and monitoring.</p> <p>Over eight years, the number of patients seen has risen from 62 to 352, and annual consultations from 186 to 986.</p> <p>97 patients have started tumour necrosis factor (TNF) blocker.</p> | <p>Improved quality of care.</p> <p>Cost effective use of staff resources.</p> | | ✓ | Improve patient flow |
| <p>94. Initiative Physiotherapist-led shoulder clinic</p> <p>Location Holland Orthopaedic and Arthritic Centre Ontario, Canada</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Razmjou, H. (2013). Evaluation of an advanced-practice physical therapist in a specialty shoulder clinic: diagnostic agreement and effect on wait times. <i>Physiotherapy Canada</i>, 65:46-55</p> | <p>Comparison of physiotherapy-led and surgeon-led shoulder clinics.</p> <p>Agreement on major diagnostic categories varied from good to excellent and indication for surgery—good.</p> | <p>Wait time for physiotherapist was shorter than for surgeons.</p> <p>Surgeons' wait time reduced over a three year period.</p> | | ✓ | Reduce outpatient department waiting time |

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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>95. Initiative Physiotherapist musculoskeletal screening clinic</p> <p>Location Northern Hospital, Melbourne, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Oldmeadow, L. et al. (2007) Experienced physiotherapists as gatekeepers to hospital orthopaedic outpatient care. <i>Med J Aust</i>, 186:625-8</p> | <p>Patients with non-urgent musculoskeletal conditions were assessed by physiotherapists and subsequently by an orthopaedic surgeon.</p> | <p>Nearly two-thirds of patients with non-urgent musculoskeletal conditions did not need to see a surgeon at the time of referral.</p> <p>Patients were appropriately assessed and managed by experienced, qualified physiotherapists.</p> | | | Reduce outpatient department waiting time |
| <p>96. Initiative Physiotherapist neurosurgery screening and post-operative review clinics</p> <p>Location The Alfred Hospital, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists triaged neurosurgery outpatients to determine need for surgical or conservative intervention.</p> <p>Physiotherapists reviewed post-operatively—wound checks, neurological status, bony healing, documented outcomes, and provided recommendations.</p> | <p>Initial appointment wait reduced from 12 months to 4 months.</p> <p>20% of patients seen by physiotherapist fast-tracked to surgeon, with imaging to facilitate consultation.</p> <p>Most patients seen by physiotherapist managed conservatively and discharged without having to see a surgeon.</p> <p>Freed up surgeons' consultation time.</p> | | | Reduce outpatient department waiting time |
| <p>97. Initiative Physiotherapy-led neurosurgery spinal pain triage</p> <p>Location Sir Charles Gairdner Hospital, Western Australia</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists assess patients referred to neurosurgery with spinal pain.</p> <p>Imaging arranged before surgical consult.</p> <p>Sustained for the past six years.</p> | <p>Reduced waiting times.</p> <p>Reduced need for neurosurgical consults.</p> | | | Reduce outpatient department waiting time |

| Outpatients | | | | | |
|--|---|--|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>98. Initiative Physiotherapy for female stress urinary incontinence</p> <p>Location Multiple sites across Australia</p> <p>Workforce Physiotherapy</p> <p>Model Multi sites across Australia</p> <p>Reference Neumann, P. et al. (2005). Physiotherapy for female stress urinary incontinence: a multicentre observational study. <i>Australian and New Zealand Journal of Obstetrics and Gynaecology</i>, 45:226-32</p> | <p>Observational multi-centre clinical study of physiotherapy management of female stress urinary incontinence with follow up at one year.</p> <p>An episode of physiotherapy care consisted of a median of five (four–six) visits.</p> | <p>208 patients completed an episode of physiotherapy care.</p> <p>84% cured and 9% improved on stress testing.</p> <p>53% cured and 25% improved according to the 7-day diary.</p> <p>Significant improvement in all quality of life domains.</p> <p>At one year, approximately 80% of respondents had positive outcomes on all outcome measures.</p> | | | Reduce outpatient department waiting time |
| <p>99. Initiative Physiotherapy in fracture clinic</p> <p>Location Cork University Hospital, Ireland</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Moloney, A. et al. (2009). A 6-month evaluation of a clinical specialist physiotherapist's role in a fracture clinic. <i>Physiotherapy Ireland</i>, 30:8-15</p> | <p>The clinical specialist physiotherapist reviewed a caseload of 403 patients with uncomplicated fractures and soft tissue injuries in fracture clinic.</p> | <p>Patient caseload increased over 4-month treatment period.</p> <p>Specialist registrar hours decreased due to review by physiotherapist.</p> | | ✓ | Improve patient flow |
| <p>100. Initiative Physiotherapy in orthopaedic clinic</p> <p>Location Multiple sites across Canada</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Aiken, A. et al. (2009). Role of the advanced practice physiotherapist in decreasing surgical wait times. <i>Healthcare Quarterly</i>, 12: 80-3</p> | <p>Physiotherapist screens patients pre- and post-operatively, triages patients for surgery, prescribes conservative management and monitors patients on an ongoing basis.</p> | <p>Reduce wait times for hip and knee replacement surgeries.</p> <p>Physiotherapist can effectively manage more than 30% of the patients referred to a surgeon for hip or knee replacement surgery because these patients do not require surgery; rather, they require conservative management.</p> <p>Improve patient access to timely surgical care.</p> | | | <p>Improve patient flow</p> <p>Reduce outpatient department waiting time</p> |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>101. Initiative Physiotherapy in orthopaedic outpatient clinic</p> <p>Location Sacré-Coeur Hospital, Canada</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Desmeules, F. et al. (2013). Validation of advanced practice physiotherapy model of care in an orthopaedic outpatient clinic. <i>BMC Musculoskeletal Disorders</i>, 14:162</p> | <p>Orthopaedics outpatient clinic for hip or knee complaints—diagnosis and triage to conservative or surgical management by physiotherapist or orthopaedic surgeon.</p> <p>120 patients; 91% for knee complaint.</p> <p>Agreement for diagnosis was very high; for triage recommendation—high.</p> <p>No differences for imaging tests ordered.</p> | <p>Physiotherapist gave more education and prescribed more nonsteroidal anti-inflammatory drugs (NSAIDs), joint injections, exercises and supervised physiotherapy.</p> <p>Patient satisfaction was higher for physiotherapy care.</p> | | ✓* | Improve patient flow |
| <p>102. Initiative Physiotherapy joint arthroplasty review</p> <p>Location St Vincent’s Hospital, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists reviewed and managed non-complex patients following joint replacements, at usual post-operative intervals instead of orthopaedic surgeons.</p> <p>Divergences from normal post-operative pathway were referred to orthopaedic surgeon.</p> | <p>High levels of patient satisfaction.</p> <p>Targeted use of orthopaedic surgeons’ time for new and complex cases.</p> | | | Reduce outpatient department waiting time |
| <p>103. Initiative Physiotherapy orthopaedic triage</p> <p>Location Goulburn Valley Health, Victoria</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Physiotherapists triaged all patients on elective surgery waiting lists for total/partial hip or knee joint replacement in order to prioritise referrals for orthopaedic consultant review.</p> | <p>More efficient, streamlined service delivery for specialist consultants and health service wait list management.</p> | | | Reduce outpatient department waiting time |
| <p>104. Initiative Physiotherapy telephone orthopaedic triage</p> <p>Location The Canberra Hospital, ACT</p> <p>Workforce Physiotherapy</p> <p>Model Single centre study</p> <p>Reference Morris, J. et al. (2011). Effectiveness of a physiotherapy-initiated telephone triage of orthopaedic waitlist patients. <i>Patient Relat Outcome Meas</i>, 2:151-9</p> | <p>Physiotherapists conducted a telephone triage using a standard instrument for all new patients on the orthopaedic waiting list.</p> <p>Patients were offered primary treatment options of retaining their appointment, being discharged, referral to a new model of assessment (multidisciplinary specialist clinic), or referral to physiotherapy.</p> | <p>The telephone triage process released 21 booked appointments on the outpatient clinic waiting list over three months.</p> <p>26% of patients were referred directly to physiotherapy.</p> <p>The waiting time for an appointment for patients who remained on the waiting list was significantly shorter.</p> <p>There were significantly lower rates of failure to attend appointments.</p> | | ✓ | Reduce outpatient department waiting time |

| Outpatients | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>105. Initiative Podiatrist-led musculoskeletal clinic</p> <p>Location The Northern Hospital, Victoria</p> <p>Workforce Podiatry</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Podiatrist-led clinic assessed patients (of low priority for foot surgery) to determine benefits of conservative management versus surgery.</p> | <p>Reduced waitlist for orthopaedics.</p> <p>Quicker access to appropriate care.</p> <p>Improved outcomes through timely conservative management.</p> | | | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>106. Initiative Psychologist as first contact for general paediatric referrals</p> <p>Location Ipswich Hospital, West Moreton Hospital and Health Service, Queensland</p> <p>Workforce Psychology</p> <p>Model Single centre study</p> <p>Reference Psychology department, Ipswich Hospital</p> | <p>The psychologist provided the first point of contact following triage for 60% of category 2 and 3 referrals to general paediatric clinics. Where required, the psychologist referred directly to the paediatrician.</p> | <p>Significant reduction in wait time.</p> <p>25% of patients seen by psychologist required referral on to paediatrician.</p> | | | <p>Reduce outpatient department waiting time</p> |
| <p>107. Initiative Rural generalist allied health practitioner</p> <p>Location Chinchilla Health Service, Darling Downs Hospital and Health Service, Queensland</p> <p>Workforce Occupational therapy Physiotherapy Speech pathology Nutrition and dietetics</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>Development and piloting of integration of rural generalist allied health practitioner with medical and nursing staff in medical outpatient setting in a small rural hospital.</p> <p>Use of competency based framework to support skill-sharing across workforce (within allied health and across allied health, nursing and medical).</p> <p>Allied health intake process in the acute setting for those admitted with chronic and/or complex conditions.</p> <p>Improved coordination of case management and allied health services in the acute setting.</p> <p>Appropriate and prioritised referrals onto allied health services.</p> <p>Improved clinical outcomes as a result of timely intervention and management as per best practice recommendations.</p> | <p>Increased and timely access to allied health services.</p> | | ✓ | <p>Improve patient flow</p> |

| Outpatients | | | | | |
|--|---|--|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>108. Initiative Self-referral for musculoskeletal physiotherapy</p> <p>Location Multiple sites in NHS, England and Scotland, UK</p> <p>Workforce Physiotherapy</p> <p>Model Established practice</p> <p>Reference Chartered Society of Physiotherapy. (2013) <i>Self-referral</i>. www.csp.org.uk/topics/self-referral</p> | <p>Patients contact NHS physiotherapy services directly, rather than going through their GPs.</p> <p>The patient completes a short self-assessment questionnaire, which is reviewed by a physiotherapist and, depending on their clinical need; an appointment (which may include a waiting time) is allocated accordingly.</p> | <p>Reduces the need for healthcare interventions such as X-rays and prescribing.</p> <p>Reduces need for referrals to orthopaedic specialists.</p> <p>People who self-refer to physiotherapy take fewer days off work.</p> <p>Early intervention for lower back pain reduces its recurrence in the following year by up to 40%.</p> <p>Self-referral has not led to an increase in demand for physiotherapy.</p> | | * | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>109. Initiative Speech and language-led clinics for endoscopic examination of the larynx</p> <p>Location Multiple sites across Scotland, UK</p> <p>Workforce Speech pathology</p> <p>Model Single centre study</p> <p>Reference The Scottish Government. (2011). <i>From strength to strength: Celebrating 10 years of The Allied Health professions in Scotland</i>. www.scotland.gov.uk</p> | <p>Speech pathologists who specialise in voice disorders were trained in nasendoscopy and laryngeal examination.</p> <p>The speech pathology-led clinic was established with referrals coming through ENT clinics.</p> <p>This later developed to include referrals from GPs.</p> | <p>Patients with Parkinson's disease were routinely examined prior to intensive therapy for voice.</p> <p>Occupational and professional voice users were fast-tracked.</p> | | ✓* | Improve patient flow |
| <p>110. Initiative Orthoptic management of chronic eye conditions</p> <p>Location Northern Health, Victoria</p> <p>Workforce Orthoptics</p> <p>Model Single centre study</p> <p>Reference www.hwainventory.net.au</p> | <p>An orthoptic workforce was credentialed (using a competency training package) to undertake assessment and management of patients with chronic eye conditions, including diabetic retinopathy, cataracts and glaucoma.</p> | <p>More timely access to care.</p> <p>Increased staff capacity.</p> <p>Allowed for development of a service for patients with retinal disorders.</p> <p>Freed up ophthalmologists to take on more complex cases.</p> | | ✓ | <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |

| Pre-admission Clinic | | | | | |
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| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>11. Initiative Pharmacist prescriber in an elective surgery pre-admission clinic</p> <p>Location Princess Alexandra Hospital, Metro South Hospital and Health Service, Queensland</p> <p>Workforce Pharmacy</p> <p>Model Single centre study</p> <p>Reference Hale, A. et al. (2013). Perioperative medication management: expanding the role of the preadmission clinic pharmacist in a single centre, randomised controlled trial of collaborative prescribing, <i>BMJ Open</i>, 3(7): e003027</p> | <p>A pharmacist generated the inpatient medication chart in an elective surgery pre-admission clinic to reflect the patient’s regular medication; plan for medication peri-operatively and plan for venous thromboembolism (VTE) prophylaxis requirements.</p> | <p>Medication charts in the intervention arm contained fewer omissions and prescribing errors compared with charts generated by resident medical officers.</p> <p>Pharmacists equivalent to resident medical officers in appropriateness of VTE prophylaxis ordered at time of admission.</p> <p>Time saving for junior house officers and anaesthetists.</p> | | <p>✓*</p> | <p>National Elective Surgery Target (NEST)</p> <p>Improve patient flow</p> |

| Sub-acute | | | | | |
|---|---|---|-----------|----------------|--|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>112. Initiative Indigenous health worker in Deadly Ears program</p> <p>Location Cherbourg Health Service, Darling Downs Hospital and Health Service</p> <p>Workforce Indigenous health</p> <p>Model Established practice</p> <p>Reference Deadly Ears program www.health.qld.gov.au</p> | <p>The Indigenous health worker in Cherbourg enables children to access ENT services through Telehealth.</p> <p>Hearing and ear health screening (video otoscopy, tympanometry, screening audio) are completed by health worker and reviewed by ENT and triaged into service.</p> | <p>Improved patient flow.</p> <p>Reduced waiting lists for ENT.</p> <p>Increased level of coverage for screening.</p> <p>Increased ear health understanding for community.</p> | | | <p>Improve health services for regional, rural and remote communities</p> <p>Reduce outpatient department waiting time</p> <p>Improve patient flow</p> |
| <p>113. Initiative Primary care-based child clinical psychology service</p> <p>Location Multiple general practices across London, UK</p> <p>Workforce Psychology</p> <p>Model Established practice</p> <p>Reference Department of Health. (2011). <i>Models of Collaborative care for children and youth (0-25 years)</i>, www.health.qld.gov.au.</p> | <p>A psychology service was established within GP practices to provide mental health care provision for children (up to 17 years).</p> <p>Referral to tertiary/specialist services was made as required.</p> | <p>A reduced number of sessions were required to complete treatment with a corresponding reduction in costs of up to 50% over a 12-month period.</p> <p>Increased access to psychology services for families.</p> | | | <p>Provide better healthcare to children</p> <p>Improve patient flow</p> |

| Sub-acute | | | | | |
|---|---|--|-----------|----------------|---|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>114. Initiative Allied health in aged care</p> <p>Location Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland</p> <p>Workforce Physiotherapy Occupational therapy Allied health assistance</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Two new roles—an advanced allied health practitioner supported by an advanced allied health assistant, were implemented in an outpatient geriatric clinic to improve patient access to earlier intervention and specialist services.</p> <p>The roles were supported by targeted training and development of criteria-based decision-making processes.</p> | <p>Preliminary outcomes:</p> <ul style="list-style-type: none"> • more targeted geriatrician time for both simple and complex cases • reduced waiting time to specialist geriatrician services • targeted earlier referral to appropriate community-based allied health services • reduced hospital admissions/improvements in patient function and/or functional maintenance. | ✓ | ✓ | <p>Effective sub-acute care</p> <p>Improve patient flow</p> |
| <p>115. Initiative Allied health in transition care program</p> <p>Location Mackay Hospital, Mackay Hospital and Health Service, Queensland</p> <p>Workforce Physiotherapy Occupational therapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>A model of professional skill-sharing was implemented to reduce duplication and improve service efficiency in allied health services and patient experience for community-dwelling older people experiencing functional decline.</p> | <p>Professional skill-sharing between occupational therapists and physiotherapists was equivalent in outcome to uni-professional intervention.</p> <p>Patients preferred a model where care was provided by one, as opposed to multiple, allied health clinicians.</p> | | ✓ | <p>Effective sub-acute care</p> <p>Improve patient flow</p> |

| Sub-acute | | | | | |
|---|--|---|-----------|----------------|---|
| Initiative details | Approach | Outcome | Delegated | Extended scope | Priority area |
| <p>116. Initiative Allied health-led inpatient rehabilitation</p> <p>Location Redland and Wynnum Hospitals, Metro South Hospital and Health Services, Queensland</p> <p>Workforce Speech pathology Physiotherapy Occupational therapy</p> <p>Model Single centre study</p> <p>Reference www.health.qld.gov.au</p> | <p>Allied health professional is first point of contact for rehabilitation and geriatric referrals:</p> <ul style="list-style-type: none"> • completing initial assessment • accepting patients for the rehabilitation program, or • making alternative recommendations. <p>The allied health professional coordinates the shared-care model for medical management of patients and makes recommendations under the clinical supervision of the geriatrician.</p> | <p>Preliminary outcomes:</p> <ul style="list-style-type: none"> • reduced time between referral and review by geriatrician • improved access to geriatrician for review of rehabilitation and geriatric patients • improved timing and accuracy of coding for rehabilitation patients providing funding benefits • decreased admission rates within 28 days for this patient group • staff satisfaction survey suggested good satisfaction with functioning of role. | | ✓ | <p>Effective sub-acute care</p> <p>Improve patient flow</p> |
| <p>117. Initiative Pharmacy-generated medication chart for discharge to residential care</p> <p>Location Austin Health, Victoria</p> <p>Workforce Pharmacy</p> <p>Model Established practice</p> <p>Reference Tran, T. et al. (2012). Development and Evaluation of a Hospital Pharmacy Generated Interim Residential Care Medication Administration Chart. <i>J Pharmacy Practice and Research</i>, 42: 100-5</p> | <p>Interim residential care medication administration chart (IRMAC) preparation integrated into pharmacy discharge process.</p> <p>IRMAC took a mean of 8.7 minutes to prepare.</p> | <p>For patients discharged to a residential care facility:</p> <ul style="list-style-type: none"> • 95% had IRMAC compared with pre-intervention rate of 38% • medication discrepancy rate was 1%. | | | Effective sub-acute care |