

# Health Practitioner Research Scheme

## 2022 Funding Round Application Guidelines

The Allied Health Professions' Office of Queensland (AHPOQ) welcomes all Health Practitioners to the 2022 funding round of the Health Practitioner Research Scheme

### What's new

- This round is open to new and mid-career researchers with projects of **one-year** duration:
  - new researcher maximum amount awarded - \$30,000 per project
  - mid-career researcher maximum amount awarded - \$37,000 per project
- Additional information is included to assist applicants with their submissions. Read these guidelines carefully and contact the HPRS Coordinator with any additional questions, prior to submitting your application.

### Application checklist

A complete application form, including all signatures and attachments must be included as a PDF for your application to be considered. Before you submit your application, please check:

1. The chief investigator, mentor and research team are all eligible to apply (section 5).
2. Your project is eligible for funding under this scheme and you can clearly demonstrate that it meets the target area (sections 2 & 4).
3. Each section of the application is completed.
4. Each section complies with the formatting and length requirements.
5. The application is signed by ALL appropriate persons. Electronic signatures may be obtained where required, however these must be visible as a signature on the final copy of the application. Applications cannot be signed on behalf of another team member.

### Submitting your application

Please submit a PDF copy of your application using the [2022 Funding Round Application Form](#) via email to: [HP-Research@health.qld.gov.au](mailto:HP-Research@health.qld.gov.au) by

**5pm, Thursday, 7 October 2021**

It is the responsibility of the applicant to ensure that it is a true, full copy of the signed application. Submitted applications are not reviewed prior to the scheme's closing date and you will not be advised prior to the scheme closing if your application is incomplete in any way. **Late applications will not be considered under any circumstances.**

Please direct any enquiries to the Health Practitioner Research Scheme Coordinator (phone 3328 9298 or email [HP-Research@health.qld.gov.au](mailto:HP-Research@health.qld.gov.au)).

# Contents

What's new .....	1
Application checklist.....	1
Submitting your application .....	1
1. Introduction.....	3
2. Aims of the Scheme .....	3
3. Target area and priorities .....	3
4. Eligible research projects and uses of funding .....	4
4.1 Examples of eligible research activities that will be considered for funding..	4
4.2 Examples of ineligible research activities that will not be considered.....	4
4.3 Example uses of HPRS funding .....	5
5. Eligibility of project team .....	6
5.1 Chief Investigators.....	6
5.1.1 Researcher categories .....	6
5.2 Mentors .....	7
5.3 Associate Investigators .....	7
6. Conditions of the Scheme.....	8
7. Application process .....	8
7.1 Application form .....	9
7.1.1 Research outline content.....	9
7.2 Certification .....	10
7.3 Outcomes.....	10
7.4 Funding .....	10
7.5 Reporting .....	10
7.6 Ethics and SSA approvals .....	10
7.7 Confidentiality.....	11
7.8 Timeline .....	11
8. Further information .....	11
9. Appendices.....	12
Appendix A - Health Practitioner / Dental Officer professions .....	12

# 1. Introduction

The Health Practitioner Research Scheme (HPRS or the Scheme) is administered and managed by the Allied Health Professions' Office of Queensland (AHPOQ), Clinical Excellence Queensland, with the Health Practitioner Research Advisory Group as the Scheme's governing body.

The [Health Practitioners and Dental Officers \(Queensland Health\) Certified Agreement \(No.3\) 2019](#) (HPDO3) provides for up to \$400,000 in funding for eligible Health Practitioner (HP) professions listed in schedule 3 of the HPDO3 and employed by Queensland Health and Mater Health Service to build research capacity in the health practitioner workforce and facilitate the implementation of evidence based clinical services in Queensland Health.

Applications will be open to new and mid-career researchers in the 2022 funding round with funding available in the 2022-23 financial year for one-year projects.

# 2. Aims of the Scheme

The aims of the Scheme are to:

- conduct research that adds to evidence that enables the value of HP services provided to the clients of Queensland Health to be enhanced;
- build the research capacity and capability of the HP workforce in Queensland Health;
- build and contribute to multidisciplinary research and health delivery partnerships and collaboration;
- provide opportunities for HP researchers across the state; and
- enhance dissemination of research findings.

# 3. Target area and priorities

HPRS funding is provided to support evaluations of innovative health practitioner workforce models of care and service delivery, digital transformation and clinical education and training initiatives that align to one or more of the following strategic priorities:

- [Optimising the allied health workforce for best care and best value 2019-2029](#) (the 10-year Strategy);
- [My health, Queensland's future: Advancing health 2026](#) (direction 4 - pursuing innovation); and
- [Safe and applicable health care for rural and remote communities](#).

**The target area for this funding round is evaluation of Health Practitioner workforce models of care and service delivery, digital transformation and clinical education and training that improves patient access to care and health outcomes.**

If the application does not clearly demonstrate that the research proposal meets the target area or align with the strategic priorities, it will be deemed ineligible for funding in this round of the Scheme (see Section 4 for further clarification).

While all applications will be assessed and ranked based on their merit, projects will also be viewed favorably if they demonstrate and include one or more of the following:

- rural and remote, and regional partnerships or chief investigators;
- partnerships with other Queensland Health sites, universities, and industry professionals;
- collaboration across professions, services, sites and/or external agencies.

## 4. Eligible research projects and uses of funding

### 4.1 Examples of eligible research activities that will be considered for funding

Examples of previous eligible projects that were successful in securing funding through the Scheme include:

- the evaluation of a student-assisted community rehabilitation and lifestyle service;
- the evaluation of a telehealth 'virtual group' model for the delivery of persistent pain management for rural and remote patients;
- early identification and management of dysphagia in patients with Chronic Obstructive Pulmonary Disease through the implementation of an allied health assistant delegated screening model
- evaluation of the effectiveness of a pharmacist led rural antibiotic allergy de-labelling service;
- enhancing speech pathology outpatient models of care in regional services for patients with head and neck cancer.

### 4.2 Examples of ineligible research activities that will not be considered

Funding through the Scheme is provided to support the evaluation of service models, as opposed to the implementation of new services or the development of resources which will not be funded. The following examples of research activities and projects that are ineligible for this Scheme include:

- **Projects that do not meet the target area of the Scheme in Section 3 of this guideline** (evaluation of Health Practitioner workforce models of care and service delivery, digital transformation and clinical education and training that improves patient access to care and health outcomes)
- **Research with multiple aims and objectives where the PRIMARY focus (and therefore majority of the workload / budget) is not on health practitioner workforce models of care, service delivery, digital transformation or clinical education and training initiatives.**
  - e.g. evaluations of models of care or service delivery that are not predominantly Health Practitioner models or are unlikely to improve patient access and health outcomes.
- **Research coordinated by a Health Practitioner position that primarily affects or benefits the non-HP workforce.**
  - e.g. research into pharmacy practices to reduce medical officer prescribing errors
- **Research that evaluates the effectiveness of a specific clinical intervention, screening tool, assessment technique or piece of equipment.**
  - e.g. research that evaluates a new piece of medical imaging equipment, a new podiatric surgery technique or procedure, or a patient questionnaire for triaging purposes.
- **Projects that compare the efficacy of one clinical intervention to another and projects that investigate the appropriateness of an intervention.**
  - e.g. if the use of one x-ray type is appropriate given the levels of radiation exposure in comparison to other x-ray options, and
  - whether the use of restrictive practices on patients with mental health issues is appropriate or acceptable.
- **Projects that predominantly involve the development of a research tool or similar for use in intervention or client assessment.**
  - e.g. the development of a standardised test, screening tool, a patient or clinician education module.

- **Meta-analysis, systematic reviews of a clinical topic, clinical audit or the development of best practice clinical guidelines.**
  - e.g. auditing post-discharge patient data for the number of missed diagnoses to inform best practice guidelines.
- **Data collection or quality improvement activities, defined as activities that the Hospital and Health Service would expect are done as a matter course and do not require research ethics approval or exemption.**
  - e.g. looking at patient characteristics that contribute to self-discharging; development of an intervention tool based on patient involvement, development and/or evaluation of an audit protocol, exploratory studies, research on patient preferences and willingness to pay.
  - The development of training packages or education modules.

### 4.3 Example uses of HPRS funding

A major aim of the Scheme is to build HP research skills and capacity, it is therefore expected that most of the requested funding would be allocated to provide backfill for the Chief Investigator (CI), enabling them to undertake the majority of the research activities without outsourcing wherever possible.

Additionally, HPRS funding may also be used for:

- Research assistant time to gather data and other lower level research activities.
  - The HP level for any research assistant time must be appropriate for the level of duties to be undertaken.
- Contracting fees for a statistician or other relevant experts needed for the research, where one is not available within the Health and Hospital Service (HHS) or through existing collaborative arrangements with universities or other HHSs.
  - The majority of funding should NOT be used to engage external experts.
- Administrative costs including photocopying, printing, postage, etc.
- Telecommunication costs including phone, videoconferencing, etc.
- Travel costs including accommodation, taxis, flights and meal allowances where this is the most appropriate method of collaboration and/or data collection.
- For the purposes of dissemination or communication of research results. This must be clearly indicated in the budget as a separate line item.

#### **Funds may not be used for:**

- Hiring additional FTE to implement the service being researched and evaluated.
- The purchase of capital expenditure of any kind including computer hardware, office furniture or clinical machinery.
- The use of office space or other location-related expenditure. If these items are necessary for the conduct of the research project, evidence of support from the HHS for the equipment/space is required to support the feasibility of the project.

## 5. Eligibility of project team

### 5.1 Chief Investigators

As the project lead, the CI must be:

1. a Queensland Health (HHS or Department of Health) or Mater Health Service employee for the duration of the project, and
2. employed against a Health Practitioner position (HP1 – HP8) in a profession listed in the [Health Practitioners and Dental Officers \(Queensland Health\) Certified Agreement \(No.3\) 2019](#) - Schedule 3 (see appendix A).

The CI must notify AHPOQ immediately of any changes to employment or periods of extended leave (greater than 4 weeks). If the CI ceases to work for Queensland Health or the Mater, or is unable to continue with the research activity, the relevant Head of Department and Director of Allied Health (or equivalent) will be contacted to see if the project can continue with a new CI that meets the eligibility requirements of the Scheme. If the CI plans to take extended leave during the research project, AHPOQ must be notified in writing and details provided on implications for the project impacts, including how the timelines and outcomes will be met.

#### 5.1.1 Researcher categories

This round is open to CIs who are 'new' and 'mid-career' researchers. The researcher category (and therefore funding amount available) is determined by the CI's research experience. The CI's time as a clinician does not influence this categorization, for example, someone who has been practicing for 15 years but is undertaking their first research project would be considered a 'new' researcher for this Scheme. Associate Investigators in the project team may be 'new', 'mid-career' or 'experienced' researchers; mentors should have significantly more research experience than the CI. CIs may submit their application in a more experienced researcher category however the application must be competitive when judged alongside and against applications from the more experienced researchers in that category.

Category	Criteria	Additional information
<b>New Researcher</b>	<ol style="list-style-type: none"><li>1. Has not yet attained, but may be in the process of completing, a relevant higher degree by research (including MPhil, PhD or professional doctorate etc.); <b>AND</b></li><li>2. Has not received significant competitive funding (over \$50,000) through any scheme as the Principal / Chief Investigator of a research project.</li></ol>	Generally, a new researcher has no or minimal experience in: <ul style="list-style-type: none"><li>• undertaking research tasks or obtaining ethical approval,</li><li>• publishing the outcomes of previous research in peer reviewed journals, either as the primary author or a co-author.</li></ul>
<b>Mid-Career Researcher</b>	<ol style="list-style-type: none"><li>1. Has not attained, or may be in the process of completing, a higher degree by research; <b>OR</b></li><li>2. Is less than 6 years out after completing a relevant higher degree by research (MPhil, PhD, Research Masters etc.) <b>AND</b></li><li>3. Has obtained some competitive research funding (less than \$150,000 funding in total) as a Principal / Chief Investigator.</li></ol>	Generally, a mid-career researcher has some experience in: <ul style="list-style-type: none"><li>• conducting research including applying for ethical approval, developing and following protocols, and managing small research teams,</li><li>• publishing the outcomes of previous research in peer reviewed journals, either as the primary author or a co-author,</li></ul>

Category	Criteria	Additional information
		<ul style="list-style-type: none"> <li>presenting research results to a local, state or national audience.</li> </ul>
<b>Experienced Researcher</b> (for mentors and other project team members in this round)	<ol style="list-style-type: none"> <li>Is 6 years out or more after completing a relevant post-graduate research qualification by research (PhD, Research Masters etc.) <b>AND</b></li> <li>Has obtained significant competitive funding (over \$150,000 in total) as the Principal / Chief Investigator of a research project.</li> </ol>	Generally, an experienced researcher has significant experience in: <ul style="list-style-type: none"> <li>conducting research, including obtaining ethical approval, developing and managing research protocols, budgets and research staff,</li> <li>presenting research results to a local, state or national audience,</li> <li>publishing with a substantial publishing history, including as first author.</li> </ul>

## 5.2 Mentors

**Mentors are required for all new researcher and mid-career researcher funding applications. To be eligible for funding under this Scheme, mentors must also be from a health profession listed in the [Health Practitioners and Dental Officers \(Queensland Health\) Certified Agreement \(No.3\) 2019 \(Schedule 3\)](#).**

A mentor is any individual with appropriate experience in designing and implementing research that will be responsible for:

- sharing knowledge and skills with the research team regarding methods, directions, creative thinking, scientific communication, ethical requirements, etc.;
- providing advice and assistance to the CI as required to successfully complete the research activity;
- ensuring the CI meets all the terms and conditions of receiving the funds, including the provision of all required reports;
- overseeing the CI's work.

The mentor will form part of the project team as an Associate Investigator (AI). While it is preferred that the mentor be a Queensland Health employee due to their active role in the project, this is not a requirement.

## 5.3 Associate Investigators

An Associate Investigator (AI) is any individual who provides some intellectual and/or practical input into the research and whose participation warrants inclusion of their name on publications. The CI must obtain written agreement from all AIs to be named on the application (they must sign in Section 9 of the application form).

Unlike the CI and Mentor, AIs may be from a non-Health Practitioner profession (e.g. dental, medical or nursing) and may also work externally to Queensland Health.

## 6. Conditions of the Scheme

Before applying, the Applicant should ensure they are able to meet the following conditions:

1. The project is suitably focused, supervised and will enhance the applicant's research capabilities.
2. The nominated mentor must play an active and supporting role in all stages of the project.
3. The research activity benefits and adds to the body of knowledge for at least one HP profession.
  - Partnerships with other professions (such as nursing or medicine) are desirable however **the primary beneficiary of the research must be a HP profession.**
4. The research activity must be conducted within Queensland Health.
  - However, as per Section 4.3, funding may be used to employ research assistants, statisticians or other relevant experts external to Queensland Health if required.
5. There is agreement and approval from the relevant line manager/supervisor in the HHS to progress this work and the project must be supported by the line managers whose services may be impacted by the project.
6. Research funded by the Scheme must comply with the established ethical guidelines of the relevant Queensland Health unit, government department, non-government organisation and/or university associated with the project. It is the responsibility of the applicant to ensure that the appropriate ethical approval is obtained, including Site Specific Approval (SSA) from the relevant Institutional Ethics Committee prior to commencement of the research project (as applicable). A copy of all ethical approvals must be forwarded to AHPOQ by August 2022.
7. Proposed changes to how the funding is spent must be approved by the appropriate Director of Allied Health. AHPOQ is to be consulted and notified of any decision to reallocate funding.
8. CIs who are awarded funding must continue work within Queensland Health or Mater Health Services for the duration of the research activity. AHPOQ must be notified immediately of any planned change of employment of the CI and may revise allocated funding accordingly.

## 7. Application process

The Scheme is competitive, and applications will be judged by a peer review panel according to pre-determined criteria and ranked accordingly, with a high standard of application required for funding to be awarded. The following tips may be useful, particularly for new applicants:

- Carefully read this document, paying particular attention to CI and Mentor eligibility rules and sign off requirements.
- Ensure the project meets the target area and is an eligible activity for this Scheme.
- Seek the input of the Mentor to complete the application where required, particularly the research outline.
- Confirm prospective AI eligibility and participation prior to commencing your application, provide each AI's personal information and ensure the application form is signed by each AI and Mentor.
- Contact your Head of Department, Director of Allied Health (or equivalent) and line manager well in advance of the application due date to advise them of your intention to apply, ensuring you also allow enough time for sign-off by the Head of Department and Executive/ Director of Allied Health (or equivalent).

## 7.1 Application form

The application form and closing dates for applications will be published on the [Health Practitioner Research Scheme Internet site](#). Late submissions cannot be accepted under any circumstances.

### 7.1.1 Research outline content

It is expected that the research outline (Section 2 of the application form) will provide the following information:

#### Introduction

- A background of the issue and the justification for the project, including the expected impact

#### Primary aims and hypotheses

- Project aims and hypotheses that clearly link the project to the Scheme's target area and priorities

#### Methodology

- Research setting and design
- Proposed participants, recruitment methods or clinical data sets / sources (as relevant) and sample size justification to allow the feasibility and potential impact of the study to be assessed.
- Proposed interventions, equipment, materials and procedures (as relevant)
- Proposed data management, analysis and outcome measures
- Project timeline
- The expected contributions of each project team member

#### Ethical considerations

- Proposed management of any identified ethical issues in your actual or proposed ethics submission to a Human Research and Ethics Committee (e.g. targeted engagement with Aboriginal or Torres Strait Islander patients, informed consent and confidentiality of patient information)

#### Expected outcomes

- How the research findings will be implemented within Qld Health (and elsewhere if applicable) post-project completion
- Dissemination strategy

#### Consumer engagement and impact

- How the research will engage with consumers, and the likely impact on consumers

#### **The Peer Review Panel use the following non-exhaustive criteria to assess applications:**

- The research activity meets the target area, demonstrates alignment with the Scheme's priorities and will contribute to the aims of the Scheme (as per sections 2 and 3 of this document).
- The research outline (page 7) meets the formatting criteria (does not exceed three pages, written in a minimum of 10pt font, single line spaced, with no modifications to the table column width).
- There is strong support and justification for the research (local, professional, evidence base).
- The research question and aims are clear and the hypotheses are sound.
- The study design and methodology are sufficiently detailed and will achieve the research aims.
- The expected research outcomes and impact are clear (e.g. clinical and organisational impact).
- The AI and Mentor relationships with the CI are feasible and likely to result in a successful project.

A member of the Peer Review Panel may contact the CI and/or Mentor to clarify any queries or request additional information regarding the application.

## 7.2 Certification

A full and complete, signed copy of the application form must be submitted for the application to be eligible for consideration. If all the required signatures are not provided, the application will be deemed ineligible and will not be processed further.

It is understood that the project team may be located in a variety of facilities and as such, signatures across multiple pages will be accepted. Emails advising of endorsement of the application will only be accepted in extenuating circumstances (i.e. the person must not be able to access a computer/printer to provide a signature within the requested timeframe due to being on personal/professional leave) and will only be accepted for members of the project team. You must obtain prior permission by the HPRS Coordinator before providing an email of endorsement.

Please note: The Director of Allied Health is a position title and does not refer to your local Director of the relevant allied health profession. If you are unsure of the Director of Allied Health within your Hospital and Health Service, please contact the HPRS Coordinator.

## 7.3 Outcomes

**The outcomes of the application review and funding allocation processes are final and cannot be negotiated.**

The results from the Peer Review Panel process will be sent to the Health Practitioner Research Advisory Group (HPRAG) for endorsement. HPRAG has discretion in determining the final amounts awarded to successful applicants based on the merit of applications. A transparent procedure will be used to award funding, and HPRAG's decision will be final.

All applicants will be notified of the result of their application via email, with individual feedback provided to applicants upon request.

The list of successful applicants may be published on the Health Practitioner Research QHEPS page.

## 7.4 Funding

**AHPOQ has no capacity to roll funds over across financial years.** Funding will be transferred from AHPOQ via a service agreement amendment window. Funding provided for a given financial year will become available at the start of the financial year (1 July 2022) and must be expended in that financial year (by 30 June 2023).

## 7.5 Reporting

It is a condition of funding that progress reports are submitted to AHPOQ every 6 months and on time, with the first 6-month report due in February 2023 (for the period 1 July to 31 December 2022). If the project is completed when the 12-month progress report is due, CIs should submit a final report instead.

AHPOQ will distribute reminders when these reports are due. Reports must be endorsed by the CI, Mentor, Head of Department (or equivalent) and Executive/Director of Allied Health.

**NOTE: The CI and Mentor will be ineligible for funding in future HPRS rounds until all outstanding reports have been submitted.**

## 7.6 Ethics and SSA approvals

Successful applicants will be notified prior to the commencement of the financial year, on the understanding that they will begin their ethics and SSA applications as soon as possible to allow time for the project to run as per the proposed timeline and funds to be expended by the financial year end.

If ethics and SSA approval has not been obtained prior to the submission of the HPRS funding application, the CI must notify AHPOQ of the submission of their ethics and SSA applications and provide a copy of the approvals. **If ethics and SSA approval have not been received by August 2022, AHPOQ in consultation with the appropriate Director of Allied Health may request that the funds are used for another research purpose.**

## 7.7 Confidentiality

All information provided during the application process is received and accepted by the Department of Health in confidence, subject to any applicable statutory exception.

AHPOQ, the Peer Review Panel, HPRAG and other persons involved in the selection process will not disclose any personal confidential information to which they become privy as a result of exercising their responsibilities in the administration of the HPRS.

Information including the names of successful applicants, their administering health facility, the title and summary of the research project and the funding amount will be made available publicly and for regular reporting and evaluation purposes. Details of unsuccessful applicants will remain confidential.

Documents held by the Queensland Government are subject to the Right to Information Act 2009 and will be retained as required under the Public Records Act 2002.

## 7.8 Timeline

Key dates of the HPRS 2022 funding round are outlined below:

Application due date	Applicants notified of results	Funding made available	Ethics & SSA due	6-month progress report (July - Dec 2022)	12-month progress report (Jan - June 2023)	Final report
7 October 2021	December 2021	July 2022	August 2022	February 2023	August 2023	On project completion

## 8. Further information

Further information regarding the HPRS may be obtained by contacting the Scheme Coordinator, AHPOQ.

Email: [HP-Research@health.qld.gov.au](mailto:HP-Research@health.qld.gov.au)

Phone: 3328 9298

## 9. Appendices

### Appendix A - Health Practitioner / Dental Officer professions

#### SCHEDULE 3 – LIST OF ELIGIBLE HEALTH PRACTITIONER DISCIPLINES/PROFESSIONS

The list of eligible health practitioner disciplines and professions are:

- (a) Anaesthetic Technicians;
- (b) Art Therapists;
- (c) Audiologists;
- (d) Biomedical Engineers and Technicians;
- (e) Breast Imaging Radiographers;
- (f) Cardiac Perfusionists;
- (g) Chemists and/or Radio-Chemists;
- (h) Clinical Measurement Scientists and Technicians;
- (i) Clinical Physiologist, including Cardiac, Sleep and Respiratory;
- (j) Dental Prosthetists;
- (k) Dental Technicians;
- (l) Dental Therapists;
- (m) Dietitians/Nutritionists;
- (n) Environmental Health Officers;
- (o) Epidemiologists;
- (p) Exercise Physiologists;
- (q) Forensic Scientists and Technicians;
- (r) Genetic Counsellors;
- (s) Health Promotion Officers;
- (t) Leisure Therapists;
- (u) Mammographers;
- (v) Medical Entomologists;
- (w) Medical Illustrators;
- (x) Medical Laboratory Scientists and Technicians;
- (y) Music Therapists;
- (z) Neurophysiologists;
- (aa) Nuclear Medicine Technologists;
- (bb) Nutritionists;
- (cc) Occupational Therapists;
- (dd) Optometrists;
- (ee) Oral Health Therapists;
- (ff) Orthoptists;
- (gg) Orthotists, Prosthetists and Technicians;
- (hh) Patient Safety Officers;
- (ii) Pharmacists and Technicians;
- (jj) Physicists, including Radiation Oncology Medical Physicists, Nuclear Medical Physicists, Radiology Medical Physicists, and Health Physicists;
- (kk) Physiotherapists;
- (ll) Podiatrists;

- (mm) Psychologists including Clinical and Neuropsychologists;
- (nn) Public Health Officers;
- (oo) Radiation Therapists;
- (pp) Radiographers/Medical Imaging Technologists;
- (qq) Rehabilitation Engineers and Technicians;
- (rr) Researchers, Clinical Trial Coordinators and Data Collection Officers;
- (ss) Scientists – Environmental Health;
- (tt) Social Work Associates;
- (uu) Social Workers;
- (vv) Sonographers, including General Sonographer, Cardiac Sonographer, Vascular Sonographer, Breast Sonographer and Obstetric (Fetomaternal) Sonographer;
- (ww) Speech Pathologists; and
- (xx) Welfare Officers.