Paramedic + Physician Assistant = Paramedic Practitioner: A Proposed Model

- Greg Reaburn – Qld Critical Care Paramedic / 3rd year Physician Associate student;
- Scott Fyfe – Tasmanian Critical Care Flight Paramedic /Physician Associate
- Robert Zolcinski – Townsville Emergency Department Physician Associate / Paramedic

1

The current Health system

- World class;

Complex:

- Layers of Government – Commonwealth/State/ Local;
- Public/private providers;
- Highly regulated;

Expensive:

- Health expenditure has grown faster than inflation;
- New technology;
- Ageing population;
- Increased number of chronic diseases;

Rural/remote/indigenous health service's:

- Difficulties recruiting and retaining Health workers;
- Shorter life span, higher rates of illness, disease;
- Higher rate hospitalisations;
- Overreliance on hospital services for their health care;
- Emergency department congestion.

2

Rural Health solutions

- Rural Health solutions:
  - Driven locally;
  - Flexible and innovative;
- Proposed solutions include:
  - Employ more Doctors;
  - Broaden scope of practice of existing workforce;
  - New categories of generalist practitioners;
  - Health assistant roles;
  - Better coordination of existing workers;
  - Growth in community and home based care;
  - Challenge professional boundaries and organizational structures;
- Primary Health Networks (PHN) have been established to "…increase the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes, and improving coordination of care to ensure patients receive the right care in the right place at the right time";
- Hospital and Health Services (HHS) have been developed "…to increase local autonomy and flexibility so that services are more responsive to local needs";
- PHNs and HHSs are well positioned to meet the unique needs of rural communities and support the introduction of a new health care role.

3

The Physician's Associate

- Began in US in the 1960s; Physician Assistant (poor descriptor)
- Now adopted by many countries; Medical Degree or Masters
- Advanced assessment, diagnostic and therapeutic reasoning skills;
- Focus on rural and remote health care;
- Orders and interpret tests, prescribes pharmacology, diagnose and treat a broad spectrum of "medical" conditions;
- Is "medically" supervised. Supervision can occur remotely. The Doctor does not need to be on site;
- Delegated Performance Autonomy enables PAs to safely diagnose and treat medical conditions with a degree of autonomy defined between the supervising Doctor and the PA.

4

Dual qualifications of a paramedic and PA

- A paramedic with a PA qualification (paramedic/PA) is skilled to perform advanced health care in two settings:
  1. Pre-hospital setting;
  2. Local Health facility setting.

1. Pre-hospital setting:

- In the pre-hospital setting a paramedic/PA can safely:
  - **"Treat and leave"** – defer to Primary Health care;
  - **"Treat and refer"** – refer to Primary Health care;
  - **"Treat and retrieve"** – retrieve to local Health facility. Once retrieved a paramedic/PA can continue to treat the patient.

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Cont.

2. Local Health facility setting.

- During ambulance "down time" a paramedic/PA can be "medically" treating patients in their local Health facility;
- A paramedic/PA will be a versatile practitioner who can straddle pre-hospital care, primary health care and hospital based care and deliver the right care, in the right place and at the right time.

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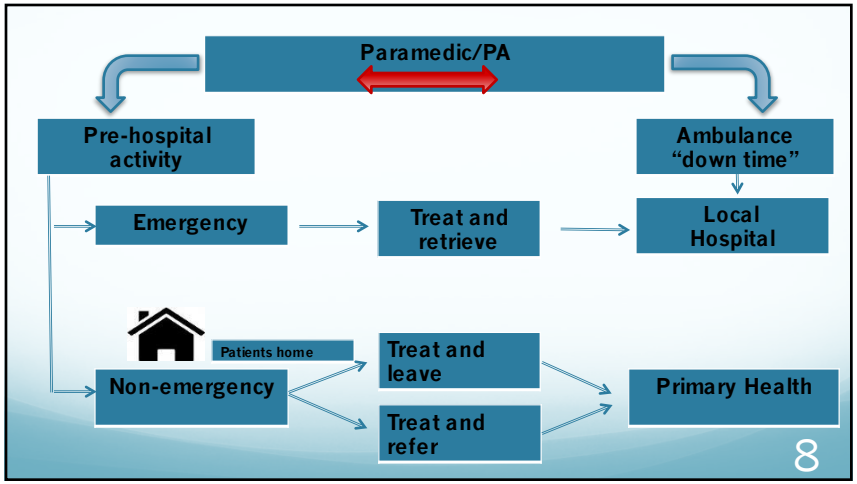
Why the Paramedic/PA?

- Lots of informal arrangements currently exists
- Paramedics already function in a remote supervision environment
- Delegated Performance Autonomy builds upon this with much broader scope
- Evidence supports stronger education for paramedics in primary health care
- JCU school of medicine degree (mapping masters)
- 70% of medicine (didactic) plus 1800 hours of clinical placement.
- 10 weeks ED, 10 weeks GP, 15 weeks in hospital medical, surgical, O&G, Paeds & Geriatrics, 5 weeks elective

7



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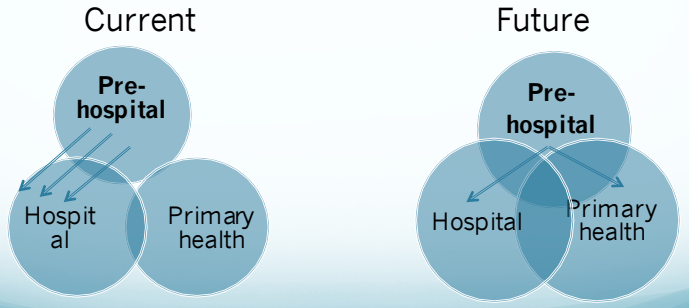
Rural health sector interactions



9

Paramedic/PA - Three basic models

- Just as the size and nature of rural communities varies. So will the Paramedic/PA model;
- Three paramedic /PA models are proposed.
- Aim = Patients receive the right care, in the right place, at the right time.

Model One:

- No funding required. Already exists;
- Low Ambulance workload;
- Performs delegated and supervised "medical" care within local Health facility;
- Attends pre-hospital emergency and non emergency cases;
- Treats non-emergency care and refers to primary health care.

Model Two:

- Joint funding;
- Medium to large rural town;
- Performs delegated and supervised "medical" care within local Health facility;
- Attends predominantly non-emergency cases;
- Treats non-emergency care and refers to primary health care.

Model Three:

- HHS funded;
- Any size rural town;
- Performs delegated and supervised "medical" care within local Health facility;

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Model One. No cost to existing Health Care system:

- Utilises the combined paramedic/PA skills of existing rural paramedic;
- Funded and operationally managed by ambulance;
- Recommended for low workload stations;
- Responds to pre-hospital cases as required;
- Pre-hospital "emergency" treatment:- Uses existing guidelines;
- Pre-hospital "non-emergency" care:- Treat and leave; Treat and refer; Treat and retrieve;
- Non-emergency scope of practice, clinical governance and audit undertaken locally by Medical Supervisor;
- When not on ambulance tasks performs "medically" supervised care at local Health facility;
  - Can "admit" patients. Highly beneficial after hours. Reduced after hours call outs to rural Drs;
  - Additional "medical" resource for local Health facility. Relieving rural Doctors workload;

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Model two – Above establishment staff

- Additional Paramedic/PA located in medium to large size rural town;
- Jointly funded by HHS and Ambulance;
- Primary role is attend to town/s subacute and non-urgent cases;
  - Keeps patients out of hospital and in primary health care;
  - Makes ambulance more available for emergencies.
- Pre-hospital "non-emergency" care:- Treat and leave; Treat and refer; Treat and retrieve;
- Scope of practice, governance and audit undertaken locally by Medical Supervisor;
- Attends pre-hospital "emergency" cases only when local ambulance unavailable;

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Cont.

- When not on ambulance tasks performs "medically" supervised care at local Health facility:
  - Additional "medical" resource for local Health facility. Relieving workload of Rural Doctors;
- Operationally managed by ambulance, HR etc.
- Work from a sedan at local Health facility;

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Model three – PA in local Health facility

- PA fully employed and dedicated to rural Health facility;
- Funded and operationally managed by HHS;
- Rostered in accordance with local Health facilities needs;
- Scope of practice is defined by local Medical Supervisor;
- This model can occur in small, medium and large towns;
- No need for Paramedic background, as this PA does **NOT** attend pre-hospital emergencies.

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Benefits

- Builds on existing workforce;
- Improves acute, sub-acute and after hours care;
- Can enable patient education:
  - Very helpful for poorly controlled chronic disease sufferers;
  - Post discharge follow up;
  - Newly diagnoses disease etc
- Improve patients short and long-term health outcomes;
- Significantly reduce the number of hospital presentations;
- Ease the current workload burden on the rural doctors – particularly after hours;
- Save State significant sums of money;
- Relatively simple models to introduce
- Employment arrangements, clinical governance frameworks, indemnity insurance and authority for medical imaging, pathology and medications already exists;

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Rural Paramedic Practitioner – model overview

	Model One	Model Two	Model three
• Primary activity	• Ambulance;	• Ambulance and HHS shared 50%	• 100% HHS; • This model already exists. Townsville ED and Cherbourg
• Secondary activity	• Medically support local Health facility;	• Medically support local Health facility;	• Low acuity pre-hospital patients;
• Goals of role	• Pre-hospital emergency and non emergency care; • Support rural Medical workforce; • Reduce hospital presentations; • Deliver the right care, in the right place, at the right time;	• Pre-hospital non-emergency care; • Support rural Medical workforce; • Reduce hospital presentations; • Deliver the right care, in the right place at the right time;	• Addition to rural Medical workforce • Reduce hospital presentations; • Deliver the right care, in the right place, at the right time;
• Low acuity patients	• Able to treat low acuity patients at home; • Can initiate treatment and link low acuity patients with PHC;	• Able to treat very low acuity patients at home; • Can treat and link low acuity patients with PHC;	
• High acuity patients	• Provides pre-hospital care and can continue to treatment within the hospital.	• Can respond to support existing ambulance with high acuity patients.	• Remains at local Health facility;
• Employer & funding	• Ambulance services; • No extra funding.	• Shared between ambulance and HHS • 50% shared funding	• HHS
• Mode of deployment	• Normal ambulance vehicle	• Ambulance sedan	
• Prototype facility	• TAS - Queenstown, • VIC - Orbost • QLD – Murgon	• TAS – St Helens • VIC – Omeo / Mallacoota • QLD – Stanthorpe	• Remote hard to fill rural; • Any size hospital.
• Clinical governance	• Pre-hospital emergency care= ambulance; • Pre-hospital primary care = Med Super; • Hospital based care = Med Super.	• Pre-hospital emergency care= ambulance; • Pre-hospital primary care = Med Super; • Hospital based care = Med Super.	• Hospital based care = Med Super.

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Strengths	Weaknesses	Opportunities	Threats
Rural health worker already exists	Training period	Health care innovation	Lack of Health, PHN and/or QAS support
Clinically very safe.	Not for all rural paramedics	New career path for paramedics	Nursing and medical unions
Reduced hospital presentations	Adhoc availability to Health facility	Improved collaboration between rural health providers	Poor supervision and support
Right care, right place, right patient	No current access to PBS and MBS	Dispensing arrangements can occur in the shorter term (pharmaceuticals)	Lack of local support
Addition to rural health workforce	Only one University offering course	Collaboration between QAS, HHS and PHNs	
Help patients navigate complicated health system	PA is an undergrad degree ? Masters	Less paramedics lost to the health system	
Opportunity to provide patient education – chronic disease, recent discharge etc	Requires cooperation of QAS, HHS and PHNs		
Improved communication between local health providers	No industrial award		
Reduced ED congestion			
Medical support for rural doctors			
Improved after hours care			
Team approach to medicine with Dr. as clear team leader.			

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