Antimicrobial Stewardship sans infectious diseases resources: building capacity in rural clinicians

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The problem

The National Safety and Quality Health Service (NSQHS) hospital accreditation standards mandate Antimicrobial Stewardship (AMS) programs in Australian hospitals.

Lack of on-site infectious diseases (ID) expertise is commonly cited as a barrier to establishing and sustaining AMS programs in regional and rural hospitals (RRH).

Approaching the problem

Two qualitative studies were undertaken to explore the insights of clinicians working with AMS programs in Australian RRH about building AMS capacity in the absence of on-site ID expertise.

Methods

Ethics: Melbourne Health HREC (QA2016144 & QA2017012)

Method: a series of semi-structured interviews and focus groups were conducted between March and September 2017.

Inclusion criteria:

- Semi-structured interviews: clinical champions or lead AMS clinicians who have knowledge and/or experience with at least one AMS program that has been sustained for greater than two years.
- Focus groups: clinical champions, lead clinicians or administrators who are involved in delivering AMS programs in a health service/s.

Participants were asked to respond based on their experience with hospitals with an Australian Statistical Geography Standard Remoteness Area classification of inner regional, outer regional, remote or very remote.

Analysis: audio-recordings were transcribed verbatim and independently coded by two researchers. The data was analysed using the Framework Method.

Participants

A total of 37 participants consented.

Profession	Number of participants	
	Focus groups	Semi-structured interviews
ID physician/microbiologist	6	7
Pharmacist	8	5
Infection control practitioner/nurse	3	2
General practitioner	3	1
Clinical administration	2	-
Total	**22**	**15**

Findings

Three key considerations for building AMS capacity in RRH clinicians were identified:

- Sustainability
- Up-skilling
- Professional hierarchies

Sustainability: maintaining capacity within the health service

Key person dependencies

'We're training up a multitude of people so that if I'm away, then others can take the lead'
Pharmacist, F12

Corporate memory

'Infection control nurses, particularly, are a key group and also, often the long term corporate memory and stability in rural and remote hospitals… not the doctors and pharmacists, and so they've become really key to it all'
ID physician, K04

Up-skilling: journey from novice to expert

On the job learning opportunities

'A lot of what I learnt, I learnt from them on the job. And so that is really hard to replicate in the regional, rural and remote settings because there is no one on the job that can teach people about antibiotics'
Pharmacist, K01

Mentorships

'*I know that lots of the regional hospitals in [X] there are some pretty inexperienced pharmacists who have been responsible for a whole of hospital Antimicrobial Stewardship program'*
Pharmacist, K01

Professional hierarchies: harnessing and challenging them

Peer to peer education and feedback

'Doctors listen to doctors'
Pharmacist, K9

'GPs maybe getting talks from other doctors or specialists or colleagues that have an interest in that area. And nurses getting talks from highly skilled nurses'
ID physician, K10

Empowerment of nurses

'*How do we work on improving that and supporting those nurses to be able to challenge appropriately within their scope? […] I suspect that many of them would not be comfortable challenging the doctor on their choice'*
Pharmacist, K13

Acknowledgements

NHMRC Centre for Research Excellence Grant [APP1079625](NCAS)
Australian Government Training Grant (JB)

Up-skilling case study – telehealth

Setting:

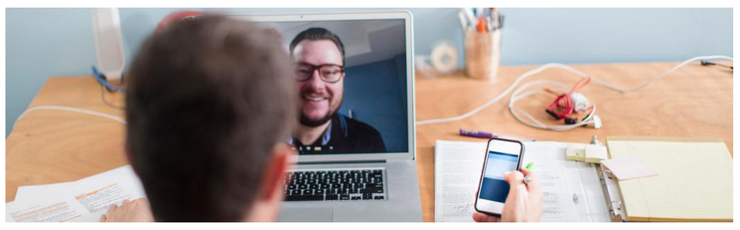
- Goulburn Valley Health: 240 bed regional health service 190km from Melbourne, Australia.
- Victorian Infectious Diseases Service (VIDS), Royal Melbourne Hospital.

What:

- Novel infectious diseases support program.
- Monthly on-site AMS ward rounds.
- Weekly virtual AMS ward rounds via videoconference (telehealth) using a web based platform.

Achievements:

- 15 – 20 patients discussed on each weekly virtual round.
- Emergent issues are able to be addressed at short notice via additional telehealth rounds.



Up-skilling case study – preceptorship

Setting:

- Royal Melbourne Hospital: a tertiary, university affiliated hospital with a well embedded AMS program.

What:

- Visits from clinicians from other urban, rural and international hospitals who are creating their own AMS programs.
- Duration of visits vary from a single day to 6 month long preceptorships.
- Multi-disciplinary attendees (ID doctors, pharmacists, nurses).

Achievements:

- Clinicians provided the opportunity to reflect on how the observed AMS program might be adapted to suit their workplace.
- Many ongoing relationships with sharing of ideas and support by phone and email.
- Promotion of a spirit of collaboration within the Australian AMS community.

Conclusions

- To build AMS program capacity in RRH clinicians sustainability, up-skilling and professional hierarchies must be considered.
- Telehealth and preceptorships are examples of techniques to up-skill RRH clinicians in AMS.