

Rural Health and Research Congress

Patients' knowledge and awareness of healthcare associated infections in rural NSW



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Dubbo

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Health
Western NSW
Local Health District



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Background Literature

The not so good news:

- In Australia approximately **7% of patients** admitted to hospital each year will acquire a healthcare associated infection (HAI).¹
- An estimated **165,000 HAIs** occur per year.²
- These increase the **cost of an admission by 8.6%.**¹
- Increase pain and suffering, length of stay, morbidity and mortality.

HAIs are largely preventable!

¹ National Health and Medical Research Council (2018)

² Mitchell et al (2017)



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Background Literature

- Patients are willing to be involved in the prevention of HAIs³
- Patients are not receiving education to play an active role in preventing HAIs⁴
- Once we understand patients' knowledge and awareness of HAIs, and how they wish to be involved in the prevention of HAIs, programs can be developed
- A pilot survey rolled out in the UK⁴ and northern Queensland⁵ demonstrated the need for further exploration into patient understandings of HAIs at a local level.

³ Seale et al (2015)

⁴ Madeo (2008)

⁵ Smyth (2015)



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Aim:

To explore:

- Patient knowledge on types and risk factors of healthcare associated infections
- Patient perceptions on the amount and type of education provided during their hospital stay
- Patient perceptions on infection control during their hospital stay
- Patient suggestions on how we can enhance patient knowledge on, and reduce the risk of infections in hospitals.



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Methods

Survey with patients:

- In the medical and surgical wards
- At Bathurst, Dubbo and Orange Base Hospitals
- February and March 2019

Survey questions:

- Patient demographics and details of admission
- Awareness and knowledge on HAIs
- Satisfaction with preventative measures taken during their hospital admission
- Suggestions on how to decrease HAIs and improve patient knowledge.

Analysis:

- Quantitative -> descriptive (univariate) analyses were conducted.
- Qualitative (open ended responses) -> content analysis. Independently categorised by two investigators.



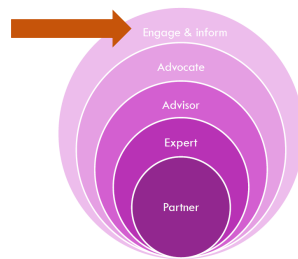
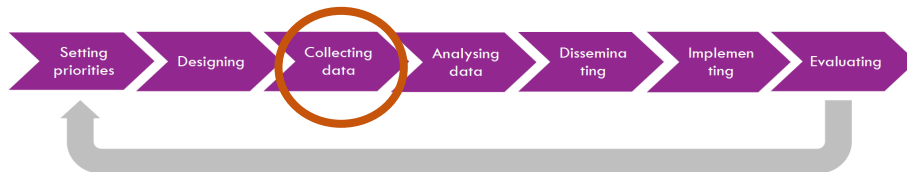
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Productive partnerships: Patient involvement in research

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"research being carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them" (National Institute for Health Research, 2019)



Provide personal perspectives through storytelling, surveys, focus groups and targeted groups

Represents the broad views and experiences of a range of people affected by a condition

Giving experiential advice to influence decisions

Recognised for high quality expertise

Valued for significant knowledge as an end-user

⁶Gutman and Scholes-Robertson (2019)



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Results: Patient Details

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Number of participants by Hospital	Bathurst	52
	Dubbo	50
	Orange	51
	TOTAL	153
% of participants by ward	Medical ward	45%
	Surgical ward	55%
% of participants by gender	Female	51%
	Male	48%
	Missing	1%
Participants age range, mean and median	Minimum	20 years
	Maximum	100 years
	Mean	63 years
	Median	65 years

Even distribution of participants

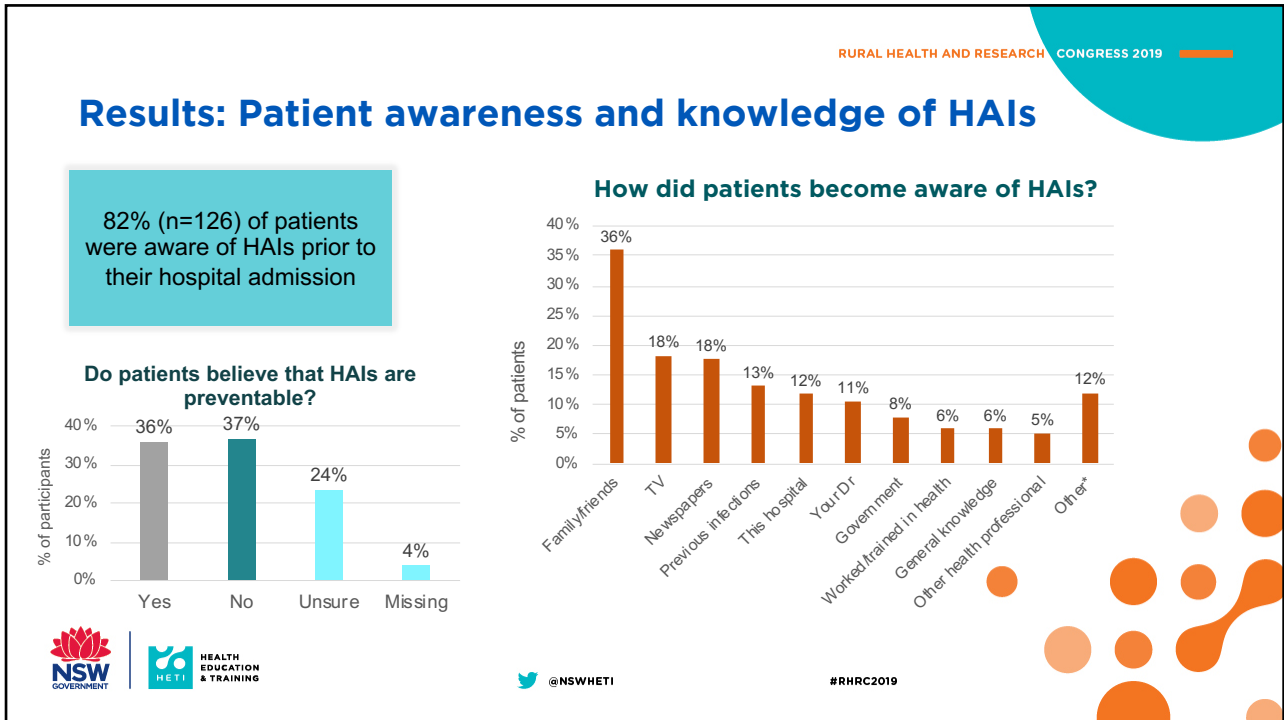
69% of patients had been admitted to a Hospital in the previous 2 years.



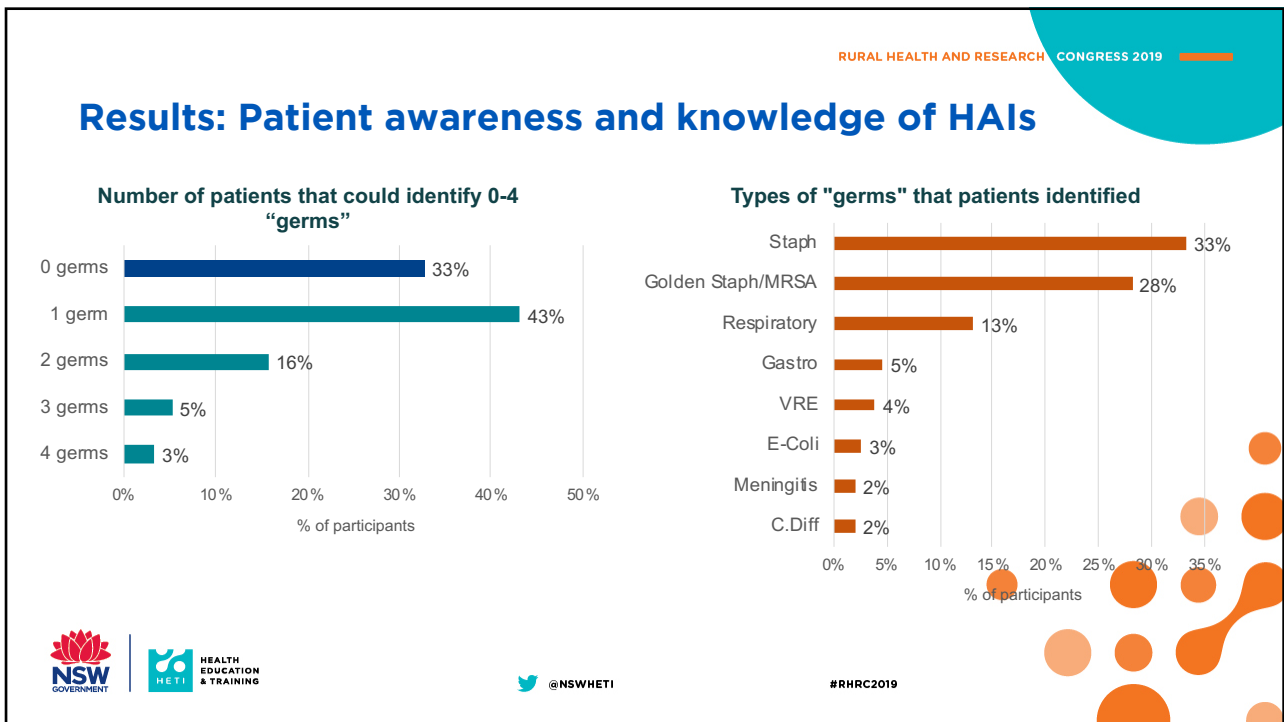
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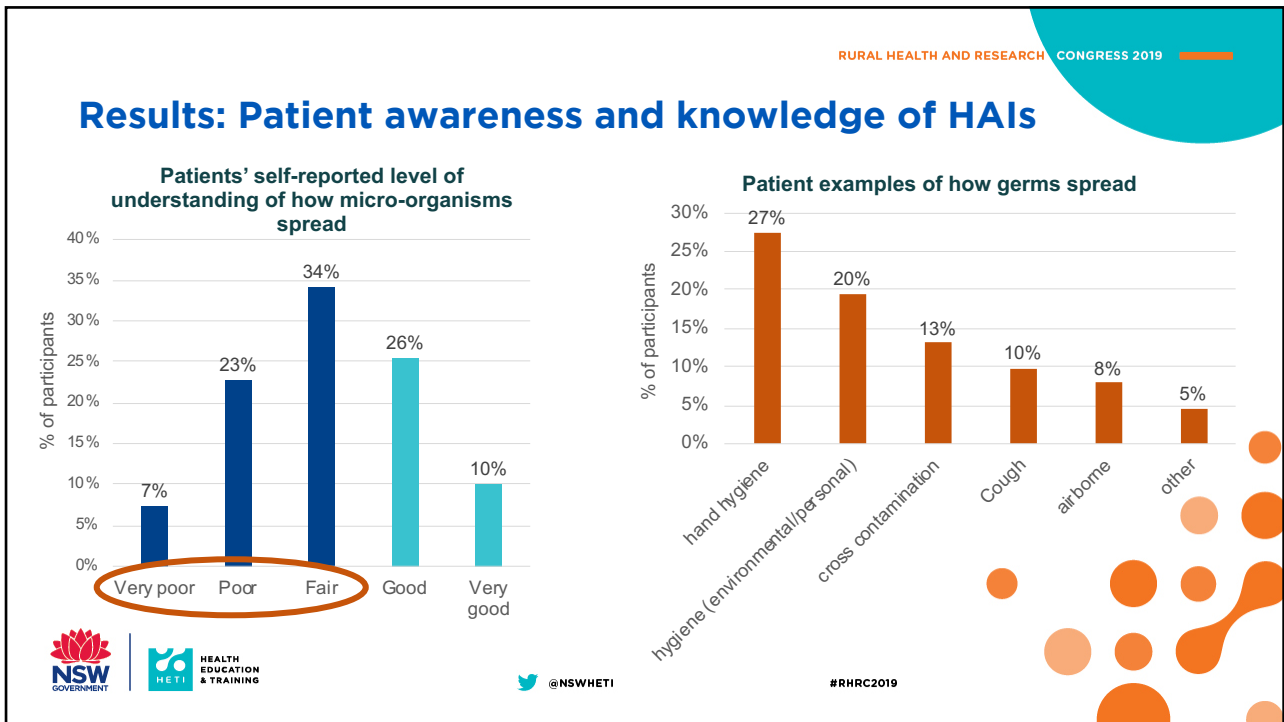
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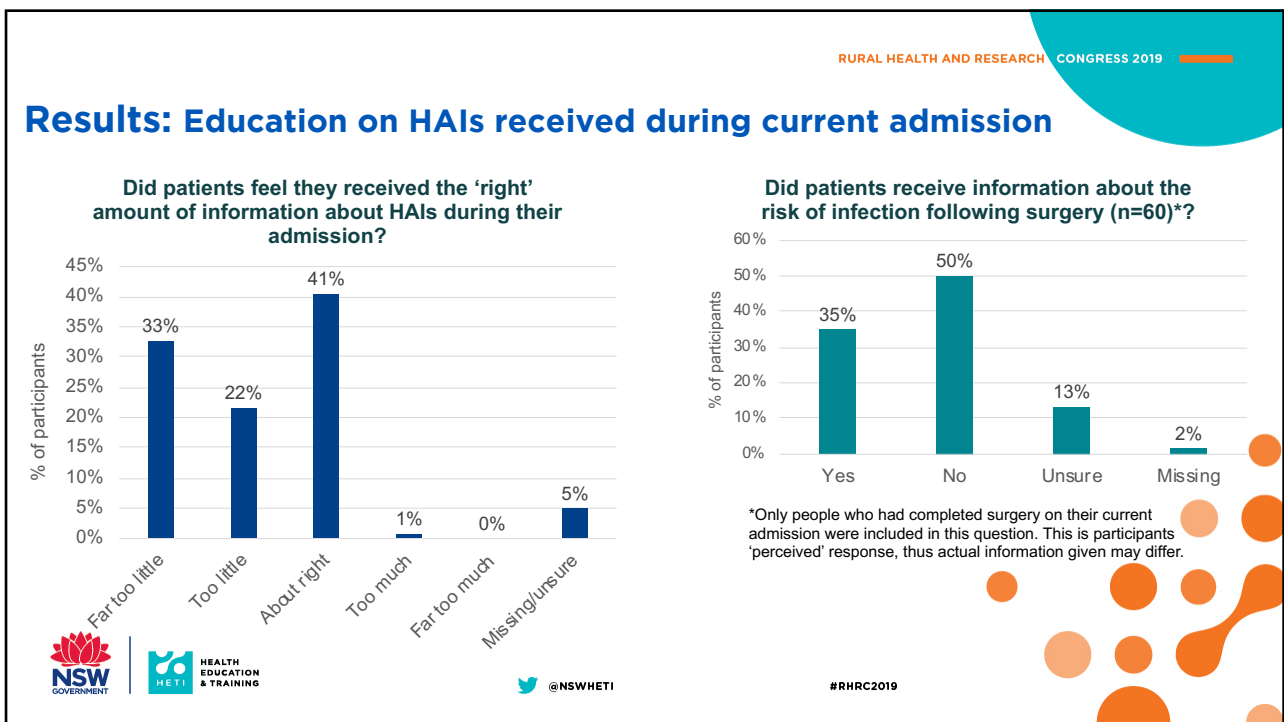
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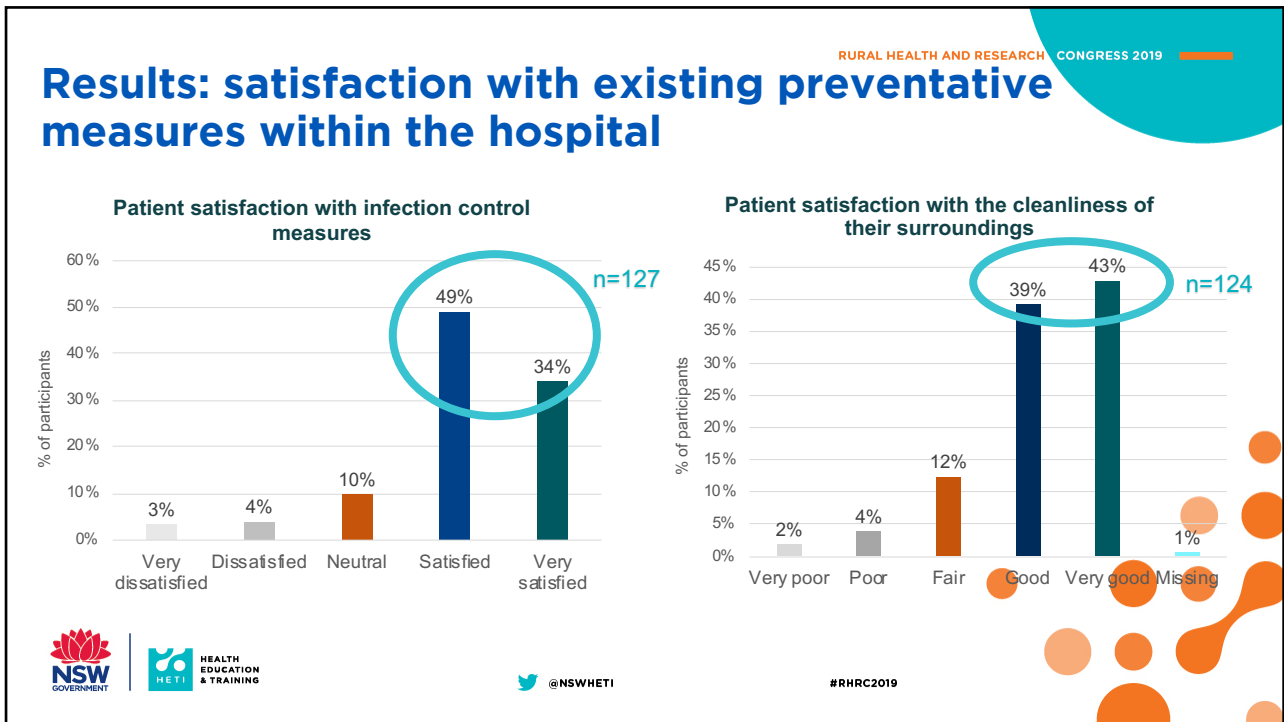
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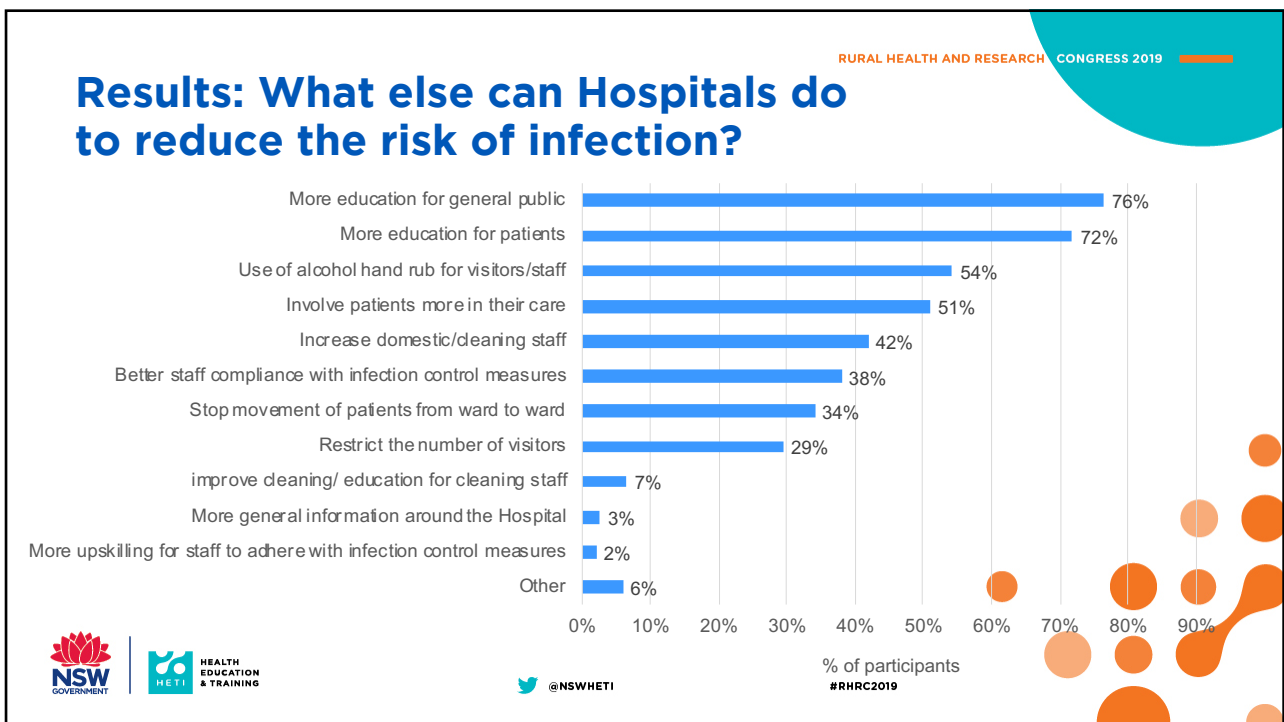
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Results: How can we improve patient knowledge about HAIs?

	Inside the Hospital	Outside the Hospital	Not specific to inside/outside
How information could be presented	<ul style="list-style-type: none"> - Hospital TV - posters, signs, brochure, information sheet, leaflet, pamphlets - verbal communication 	<ul style="list-style-type: none"> - TV, media, social media, radio - signs, paper ads, brochures - hospital website - lecture 	<ul style="list-style-type: none"> - Signs, flyers, information sheets, pamphlets, posters, literature, published information
Where information could be placed	<ul style="list-style-type: none"> - Waiting room - ED - patient rooms and bedside tables - Bathrooms - hallways 	<ul style="list-style-type: none"> - Public locations - All government areas - GP surgeries 	
When to provide information	<ul style="list-style-type: none"> - On admission - Pre-op or whilst in Hospital - For post-op and home care 	<ul style="list-style-type: none"> - Before entering the Hospital 	
Type of information	<ul style="list-style-type: none"> - Prevention - Contamination - Types of infection - Simple facts and clearer information - Visitor education (i.e. not to enter hospital if unwell and to use hand sanitiser) 	<ul style="list-style-type: none"> - General education/awareness - Infection rates - Simple information - Education for children 	<ul style="list-style-type: none"> - More education - Easy/simple education - General knowledge - Types of infection - Hospital infections (rates, outbreaks and warnings) - Home and personal hygiene - Visitors/family members to stay away when unwell

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Implications

- Participants were aware of HAIs, however level of knowledge on types of germs and how they spread was not high. Similar to the two previous pilot studies^{1,2}
- Education on HAIs in the hospitals appeared to be lacking, particularly for those that had completed surgery.
- Most participants were satisfied with infection control practices and the cleanliness of their surrounding environment.
- More education for patients, visitors and the general public was a key theme that came out of the survey.
- Suggestions for enhancing patient and general public knowledge on HAIs were wide-ranging. This may suggest the need for education through various mediums and targeted at different audiences and locations.

¹Madeo (2008)

²Smyth (2015)

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Where to from here?

- A more detailed review of the literature and existing resources.
- **Partner with the rural community & patients to provide a bottom up approach to decide HOW we can better prevent HAIs, and how any programs/projects developed can be evaluated.**
- Completed in collaboration with infection control practitioners to monitor and ensure any messages developed are consistent with current best practice guidelines.

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⁴ Madeo (2008)

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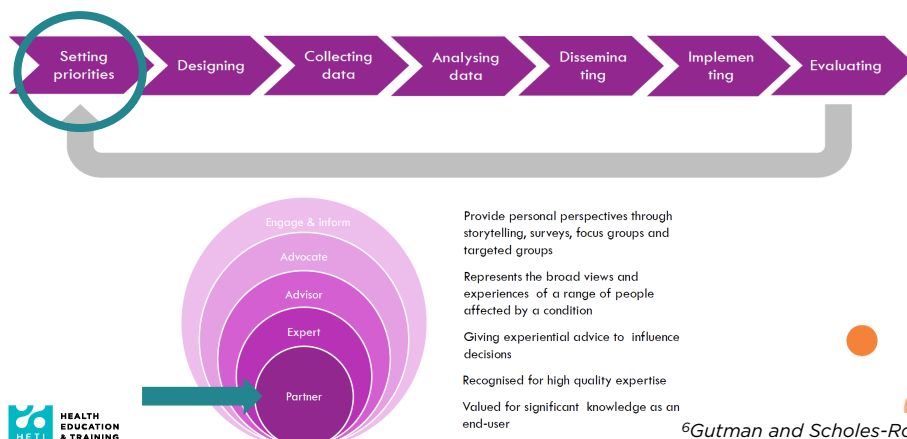


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⁶Gutman and Scholes-Robertson (2019)

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