Australian Primary Health Care Research Institute
Aboriginal Health Council of Western Australia
Indigenous
Research Partnership
AHCWA
Australian
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University

New opportunities for CQI in

Indigenous PHC

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Policy environment

“Closing the Gap”

increased focus on quality in Aboriginal Community Controlled Health Service (ACCHS) sector

Practice environment

- For ACCHS state affiliates, increased demand from member services for support for:
  - Organisational accreditation
  - Clinical accreditation
  - KPI reporting
  - Formal CQI structures and processes

APHCRI-AHCWA Indigenous Research Partnership

Dec 2012 - Feb 2015

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- Aboriginal Health Council of Western Australia (AHCWA)

  Focus on quality and supporting evidence based practice

- Australian Primary Health Care Research Institute (APHCRI)

  Commitment to policy relevant research with strong translation component and track record in quality

→ **CQI project**

Continuous quality improvement

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CQI is an essential activity within an overall clinical governance framework

"a structured organisational process for involving personnel in planning and executing a continuous stream of improvements [...] in order to provide quality health care that meets or exceeds customer expectations."
(McLaughlin and Kaluzny 1994:03)

- uses PDSA (Plan-Do-Study-Act) cycles
- involves feed back of data
- identifies one or more change strategies designed to produce improvement
- is designed or carried out by teams
- is shaped by clearly defined outcomes/targets

CQI – progress to date

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- CQI programs can be effective in improving quality and client outcomes
  - 10 years experience in Australia
  - Wide variation in outcomes between settings & programs
  - Major gaps in our understanding of the critical components of CQI interventions
  - No systematic review of evidence relating specifically to CQI programs in Indigenous populations

Questions for systematic review

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- How effective are CQI programs in PHC settings serving Indigenous and ethnic minority populations in improving quality and outcomes?
  - What type of strategies are employed in CQI programs?
  - What improvements in intermediate outcomes and processes of care have been achieved?
  - Are there any common elements among programs with improved outcomes?

Systematic review methods

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- Internationally recognised method to search published literature
- Stringent criteria:
  - Must include PDSA
  - Primary health care settings
  - Indigenous/ethnic minority populations
  - Chronic disease or preventive health
  - Measure outcomes of some kind
- Partnership group for review & interpretation

Systematic review results

- Identified 574 papers
- After eliminating papers that were not relevant we had 24 papers

Findings

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Program	Client Population	Duration	Setting
Health Disparities Collaboratives	African Americans Hispanic Americans Native Americans Other minorities	Most 1 year per collaborative One study extended to 4 years	Community Health Centers throughout USA Largest sample size is 19 centers
Diabetes Interventions Reaching and Educating Communities Together (DIRECT)	African Americans	4 years	6 primary health care practices in North Carolina, USA
California Asthma Among the School Aged	African Americans Hispanic Americans	2 years	Up to 17 Community Health Centers in California, USA
Audit and Best Practice for Chronic Disease Extension (ABCDE)	Indigenous Australians	Up to 4 years	Up to 69 Indigenous health services throughout Australia
Audit and Best Practice for Chronic Disease (ABCD)	Indigenous Australians	2 years	12 Indigenous health services in the Top End, NT
Derby Aboriginal Health Service	Indigenous Australians	10 years	1 Indigenous health service in WA
QAIHC Close the Gap Collaborative	Indigenous Australians	2 years	Up to 22 Indigenous health services in QLD

Classification of strategies

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Individual Level → provider	Group Level → health care team	Organisation Level	System Level
Education	CQI collaboratives	Linkage with community & community programs	National / state bodies
Reminders	Multidisciplinary team	Computerised information systems	Accrediting/licensing agencies
Decision support	Revised team roles and staff expectations	Electronic medical records	Payment policies
Guidelines/protocols	Self-management support, education and resources	Organisation culture	Legal systems
Data feedback	Health care team redesign	Leadership	
Local opinion leaders or 'champions'	Care planning	Structure, goals, values	
	Case / disease management	Business plan	
	Communication and teamwork	Consumer participation in governance of health care organisation	
	Group visits / chronic disease visits	Quality assurance / quality monitoring mechanisms	
	Collaborative goal setting with patients		

Based on the Four Levels of Change for Improving Quality (Ferlie et al 2001)

US diabetes programs

Program	Strategies utilised				Characteristics		Improvement: Processes of Care	Improvement: Intermediate Outcomes		
	Individual Level	Group Level	Organisation Level	System Level	Duration	No. of services	Monitoring, referrals, counselling, patient education, medication etc.	HbA1c	BP	Cholesterol
Health Disparities Collaboratives	Diabetes flow sheet Learning sessions for team members ⚑	Collaborative methodology Multidisciplinary diabetes team Monthly / quarterly feedback to team ⚑	Patient registry ⚑	National program support	1 year	19	✓	×		
					4 years	13	✓	✓	×	✓
					?	?	×	×		
					?	2	Nil reported	×		
					1 year	17	✓	✓	×	✓
Diabetes Interventions Reaching and Educating Communities Together (DIRECT)	Reminder systems Training sessions and accredited education programs QI resources and diabetes information material Monthly feedback for providers				4 years	6	✓	×	×	

✓ - Significant improvement reported (P≤0.05)

× - No significant improvement reported

⚑ Other strategies at this level were reported, however the strategies were not consistently utilised by all services.

Australian diabetes programs

Program	Strategies Utilised				Characteristics		Improvement: Processes of Care	Improvement: Intermediate Outcomes		
	Individual Level	Group Level	Organisation Level	System Level	Duration	No. of services	Monitoring, referrals, counselling, patient education, medication etc.	HbA1c	BP	Cholesterol
Audit and Best Practice for Chronic Disease (ABCD) Bailie et al (2007)	Learning conference for Aboriginal health workers ⚐	Collaborative methodology Action planning workshops Feedback to team ⚐	Systems assessment ⚐	National program support	2 years	12	✓	✓	×	×
Derby Aboriginal Health Service Marley et al (2012)	Teaching and up-skilling incorporated into routine practice	Brief participation in collaborative programs Outreach services by visiting specialists	Electronic patient information and recall system		10 years	1	✓	✓	✓	✓
QAIHC Close the Gap Panaretto et al (2013)	Training	Collaborative methodology Data feedback	Electronic clinical information system	Affiliate support	2 years	22	✓	×		

✓ - Significant improvement reported (P≤0.05)
× - No significant improvement reported

⚐ Other strategies at this level were reported, however the strategies were not consistently utilised by all services.

Participating services vs. comparison group

US Health Disparities Collaboratives National Evaluation	Improvement: Processes of Care										Improvement: Intermediate Outcomes		
	Monitoring			Examinations / Counselling				Medication					
	HbA1c	Lipid profile	Nephropathy	Eye	Foot	Dental	Smoking	Influenza vaccine	ACE inhibitor / ARB	Aspirin	HbA1c	Blood pressure	Cholesterol
Outcomes from 17 services after 1 year in CQI Collaborative	✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓
Outcomes from 18 matched services (never participated in CQI) over the same time period	×	✓	✓	✓	×	×	✓	✓	×	✓	✓	✓	✓

✓ - Significant improvement reported (P≤0.05)
× - No significant improvement reported

Qualitative findings

- Staff generally enthusiastic and perceive CQI as successful
- Implementation difficult, extent unknown
- Common barriers are:
  - Lack of personnel and time for CQI activities
  - Lack of senior leadership and support
  - Lack of technical support
  - Staff turnover
- Increased workload can affect staff morale

Synthesis

- Weak evidence:
  - Improvements highly variable
  - Extent of implementation unknown
  - Limited system level strategies
  - What strategies lead to better outcomes?
  - Improvements in care or recording?
  - Many implementation barriers

Opportunities for CQI

- Trial system level strategies
- Support innovation to address implementation barriers
- Embed strategies in services
- Support training and orientation
- Involve Aboriginal/community health workers
- More implementation research needed

Model elements

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Managing for continuous quality improvement

- Accredited training for CQI
- Affiliate level clinical governance support
- Rapid PDSA cycles
- Integration of CQI & reporting processes
- Use of e-technologies

Questions?

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