



uOttawa

L'Université canadienne  
Canada's university

# Performance Measurement and Feedback in Family Health Teams

Ministry of Health and Long Term Care  
Primary Care Research Network Rounds  
Jan 28, 2010

# Introduction

## PART I:

BEYOND FINANCIAL AND WORK SATISFACTION:  
IMPROVING MEASURES FOR EVALUATION IN  
PRIMARY HEALTH CARE

PIs: Dr. Michael Green and Dr. W Hogg

## PART II:

UNDERSTANDING THE PERFORMANCE FEEDBACK  
NEEDS OF MULTIDISCIPLINARY TEAMS

PIs: Dr. Michael Green and Dr. Sharon  
Johnston

# Research Team

- Dr. Michael Green (PI) – Queen's CSPC/CHSPR
- Dr. William Hogg (co-PI part 1) – Ottawa EBRI
- Dr. Sharon Johnston (co-PI part 2) – Ottawa EBRI
- Dr. Rick Birtwhistle – Queen's CSPC
- Dr. Rick Glazier – ICES
- Dr. Liisa Jaakimainen – ICES
- Dr. Grant Russel – Ottawa EBRI
- Dr. Walter Rosser – Queen's CSPC
- Dr. Jan Barnsley – U of T Health Policy and Management
- Staff: Colleen Savage, Tiina Liinamen, Lynn Roberts, Julie Klein Geltink, Alex Kopp, Sue Effler, Patricia Thille

# Tools Used

- Patient Surveys
- Practice Surveys
- Provider Surveys
- Chart Abstractions
- Administrative Billing Data (ICES)
- All linked at the individual level (ie. Same patients, patients with their providers)

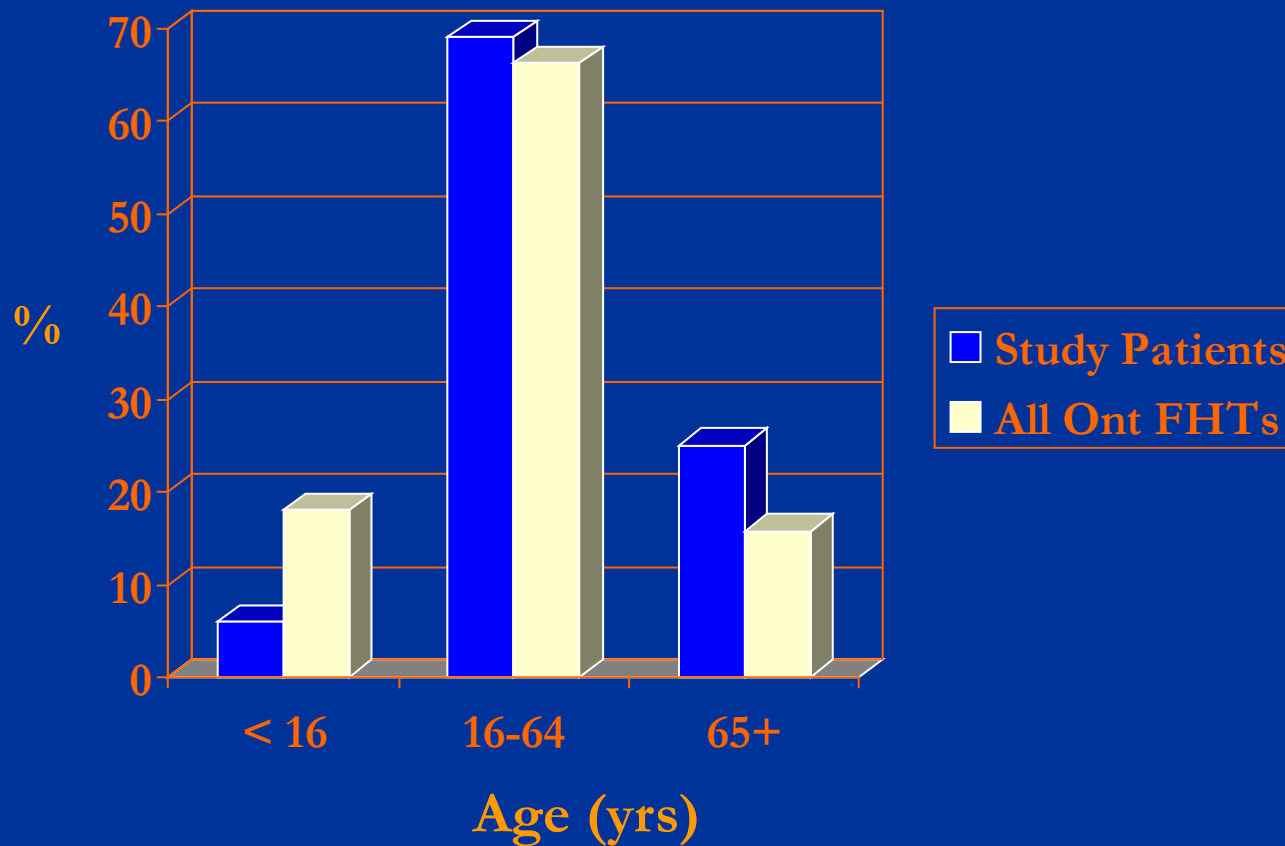
# Sample Size

	<b>All 7 FHTs</b>	●
<b># Charts Abstracted</b>	997 (99.9%)	<b>A</b>
<b># Patient Surveys</b>	813 (81%)	<b>S</b>
<b># Patients ICES Data</b>	30,039(study MDs) 891,831(all Ont)	

● Source: A= Abstraction S=Survey

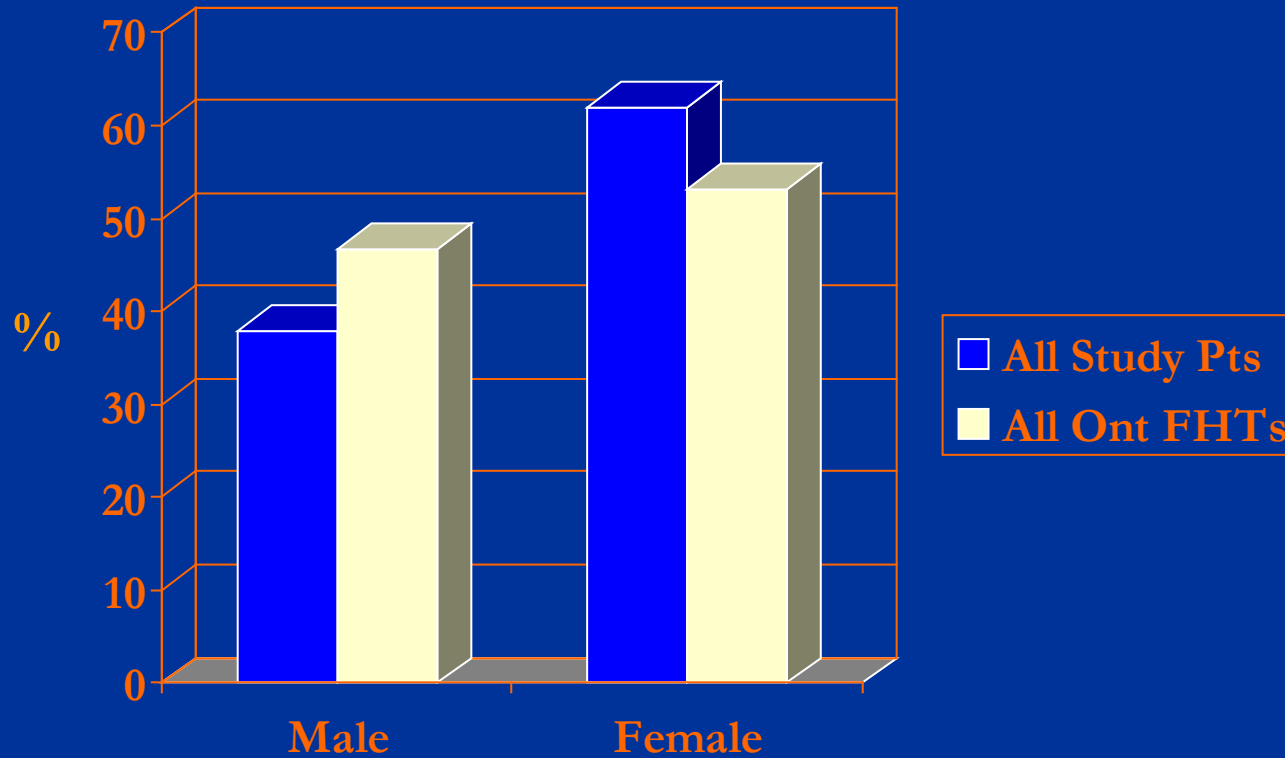
# Socio-Demographics

## Age



# Socio-Demographics

## Sex



# Socio-Demographics

	All 7 FHTs	●
Highest level of education	Frequency (Range)	S
None	0% (0-1%)	
Elementary School (some or all)	2% (0-4%)	
Some High School	6% (2-11%)	
Completed High School	13% (5-18%)	
Some College/University	16% (11-20%)	
Completed College/Trade	24% (19-30%)	
Completed University/Graduate School	39% (23-52%)	
Do not wish to answer	1% (0-2%)	

● Source: A=Abstraction S=Survey



# Socio-Demographics

	Study Pts	All Ontario FHTs	●
Income Quintiles	Frequency	Frequency	S
Q1 (lowest)	13.9%	16.4%	
Q2	19.3%	19.1%	
Q3(average)	19.6%	20.1%	
Q4	22.6%	22%	
Q5(highest)	24.1%	22%	

# Comorbidity

<b>RUB</b>	<b>All Study Pts</b>	<b>All FHTs</b>
Mean	2.7	2.1
Median	3	2
SD	1.0	1.2
IQR	1	2
<b>ADGs</b>		
1	83.3%	87.9%
2	21%	10.7%
3+	4%	1.3%

# Relationship with Practice

	All 7 FHT's	●
<b>Who is Regular Provider</b>	<b>Frequency</b>	<b>S</b>
MD	93%	
NP	2%	
No Regular Provider	6%	
#Visits 1 year (Mean/Range)	8(6-10)	A
5 or more years at practice*	65%	S

● Source: A=Abstraction S=Survey \* P<0.0001

# Relationship with Practice

	All 7 FHTs	●
Total Visits by Provider Past 12 mo	Frequency (Range)	A
Family Physician	99% (99-100%)	
Specialist Physician	0% (0-1%)	
Nurse Practitioner	19% (0-37%)	
Nurse	77% (54-99%)	
Social Worker	7% (1-14%)	
Pharmacist	3% (0-9%)	
Dietician/Nutritionist	7% (1-14%)	
Psychiatrist	1% (0-3%)	
Psychologist	1% (0-2%)	

● Source: A=Abstraction S=Survey

# Visit Type

	All 7 FHT's	●
Type of Visit	Frequency	S
Office	93%	
Phone	7%	
Email	0%	
Home	0%	

# Access

	All 7 FHT's	●
<b>Rating: Regular FHT hours</b>	<b>Frequency</b>	<b>S</b>
Poor	2%	
Fair	9%	
Good	51%	
Excellent	38%	

# Access

	All 7 FHTs	●
<b>Ability to Get Routine Care</b>	<b>Frequency</b>	<b>S</b>
Same Day	4%	
Next Working Day	4%	
Within 3 Working Days	15%	
Within 4 Working Days	14%	
Within $\geq 5$ Working Days	63%	

<b>Rating:</b>	<b>Frequency</b>	<b>S</b>
<b>Ability to Get Routine Care</b>		
Poor	12%	
Fair	29%	
Good	43%	
Excellent	16%	

● Source: A=Abstraction S=Survey

# Access

	All 7 FHTs	●
Index Visit Provider Time (Min.)	Mean (Range)	S
MD Physical Visits	30 (23-41)	
MD Non-Physical Visits	20 (16-24)	
NP Non-Physical Visits	23 (15-30)	

Rating: Care After Hours (Urgent)	Frequency	S
Very Easy	7%	
Easy	21%	
A bit difficult	28%	
Very difficult	45%	

● Source: A=Abstraction S=Survey



# Access

	All 7 FHTs	●
3rd Next Available Appt (Days)	Mean (Range)	A
Each Provider*	19 (6-32)	
Any Provider	3 (0-7)	

# Continuity and Coordination

	All 7 FHTs	●
<b>How often usual provider is seen*</b>	<b>Frequency</b>	<b>S</b>
Always	24%	
Almost always	36%	
A lot of time	23%	
Almost never	15%	
Never	2%	

<b>Rating:</b>		
<b>Frequency seeing usual provider*</b>	<b>Frequency</b>	<b>S</b>
Poor	7%	
Fair	17%	
Good	37%	
Excellent	39%	

● Source: A=Abstraction S=Survey P<0.0001

# Patient Centeredness

	All 7 FHTs	●
Satisfaction with Discussion (PPPC)	Frequency	S
Very Satisfied	68%	
Satisfied	26%	
Somewhat Satisfied	5%	
Not Satisfied	1%	

# Health Status

	<b>All 7 FHTs</b>	<b>●</b>
<b>Smoking Status</b>	<b>% (Range)</b>	<b>S</b>
Smokers Currently Smoking	24% (17-35%)	
Smokers provided info/advice	51% (46-53%)	

# Health Prevention

	All 7 FHTs	●
	% (Range)	S
Ever asked about regular activity	90% (81-96%)	
Ever asked about diet	62% (50-77%)	
Ever explained new meds side effects	87% (82-94%)	

# Health Prevention

	All 7 FHTs	●
	% (Range)	A
Blood Pressure taken $\leq$ 2 yrs ( $\geq$ 18yrs)	93% (87-98%)	
Fasting blood sugar $\leq$ 2 yrs ( $\geq$ 50yrs)	77% (72-81%)	

# Health Prevention

	ICES	All 7 FHTs	●
<b>Colorectal Cancer (<math>\geq 50</math> yrs)</b>	%	% (Range)	
Screening $\leq 2$ yrs	37.3%	56% (43-74%)	<b>A</b>
<b>Women</b>	%	% (Range)	
Mammogram $\leq 2$ yrs (50-69 yrs)	81.2%	84% (70-96%)	<b>A</b>
PAP $\leq 2$ yrs (18-69 yrs)	58.1%	83% (77-90%)	<b>A</b>

# Health Prevention

	ICES*	All 7 FHTs	●
<b>Seniors <math>\geq 65</math></b>		<b>% (Range)</b>	<b>A</b>
Flu shot $\leq 2$ yrs	34.8%	70% (39-90%)	
Bone Mineral Density $\leq 2$ yrs	51.1%	50% (37-67%)	
Male	NA	21% (11-36%)	
Female	NA	75% (57-92%)	

● Source: A=Abstraction S=Survey

ICES BMD is for 5 year lookback



# Chronic Disease Patients (CAD, HTN, DM)

	CA -All Study Pts	ICES – All Study Patients	All Ontario FHT Pts
CAD	88(9.4%)	16(1.6%)	12,059(1.4%)
CHF	NA	25(2.5%)	17,584(2.0%)
DM	131(14%)	138(14%)	64,027(7.2%)
HTN*	338(36.1%)	362(36.3%)	183,126(20.5%)
Any*	404(43.2%)	NA	NA

● Source: Study Pts: Abstraction, All Pts: ICES – for ICES CAD=Previous MI  
\*P<0.001

# Chronic Disease Patients (CAD, HTN, DM)

	All 7 FHTs	●
	% (Range)	A
Waist Measurement $\leq$ 2yrs	20% (7-58%)	
Dyslipidemia Screen $\leq$ 2yrs*	85% (75-93%)	

● Source: A=Abstraction S=Survey \*p=0.02

# Chronic Disease

	All 7 FHTs	●
<b>High Risk Chronic Pts:</b>	<b>% (Range)</b>	
BP Controlled (< 130/80)	49% (21-64%)	<b>A</b>
Patient believes cholesterol "Under Control"	93% (80-100%)	<b>S</b>
Controlled Lipids * (LDL<2.5 & Total Chol:HDL<4.0)	42% (20-100%)	<b>A</b>
<b>Low Risk Chronic Pts:</b>	<b>% (Range)</b>	
BP Controlled (< 140/90)	65% (57-77%)	<b>A</b>

# Chronic Disease

<u>Total Pts ≤ 2yrs given :</u> Self Management Advice (help groups/pamphlets/books/videos etc)	All 7 FHTs	●
	% (Range)	S
CAD	69% (25-100%)	
Diabetes	96% (83-100%)	
Hypertension	86% (74-94%)	

# Chronic Disease

	All 7 FHTs	●
	% (Range)	A
<b>Diabetes</b>		
Microalbuminuria/albumin/ creatinine $\leq$ 2yrs	74% (46-92%)	
HBA1C test $\leq$ 2yrs	94% (89-100%)	
Most Recent HBA1C Under Control ( $<0.07$ )	64% (54-75%)	
<b>CAD</b>		
<u>MEDS</u> : Aspirin (ASA)	66% (56-100%)	

# Provider Information

	All 7 FHTs	●
	Mean (Range)	S
# Active pts: Half day direct pt care (4hrs)	189 (155-260)	

**Note: Guidelines under discussion are 150-200 pts enrolled per half day**

# Team Function

	All 7 FHTs	●
Team Climate Inventory (1-5)	Mean (Range)	S
Overall 13 item score	3.5 (3.2-3.8)	

# Feedback Project

- 1 hour facilitated face to face session
- Written report
- Mixed methods evaluation – survey and key informant interviews
- Analysis focused on the perceptions of various team members on receiving feedback on performance of the team



# Participants

- All sites had written reports go to ED/Lead MD
- Feedback Sessions attended by a total of 159 staff
- Survey completed by 134/159 attendees (84%)
- In depth interviews: 34 interviews total, 24 early on , 10 later, mix of providers/support staff.

# Survey Findings: Indicators to improve individual performance.

Indicator (1=low 5=high)	MDs	Nursing/NP	Allied Health	Administrative
# patients seen	3.7	3.3	3.0	3.1
<b>Patient satisfaction</b>	<b>4.6</b>	<b>4.2</b>	<b>4.6</b>	<b>3.8</b>
<b>Team satisfaction</b>	<b>4.5</b>	<b>4.3</b>	<b>4.5</b>	<b>4.0</b>
# patients referred	2.4	3.2	3.6	2.1
<b>Preventive health</b>	<b>4.7</b>	<b>3.6</b>	<b>3.1</b>	<b>3.4</b>
<b>Time to next appt</b>	<b>4.0</b>	<b>3.6</b>	2.9	2.8

# Survey: Indicator Types 2

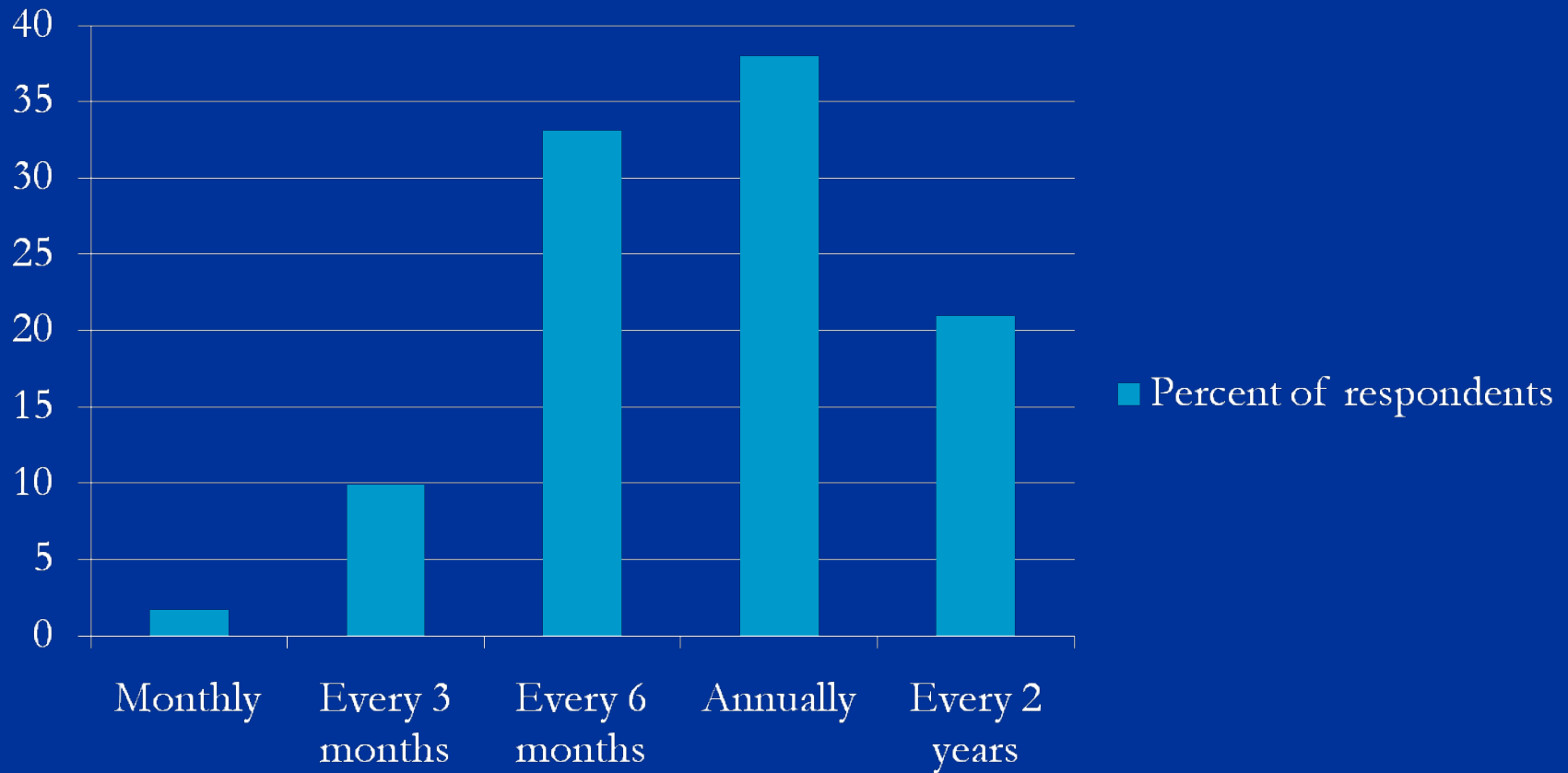
Indicator (1=low 5= high)	MDs	Nursing/NPs	Allied Health	Administrative
Process Description	3.8	3.9	2.4	2.8
Outcome Description	4.1	3.9	3.2	2.8
Process Comparison	3.5	3.7	2.7	2.5
Outcome Comparison	3.6	3.7	2.7	2.6

# Feedback Process

Feedback Method (1=low 5=high)	MDs	Nursing/NPs	Allied Health	Administrative
Informal verbal	3.3	3.0	2.9	3.3
<b>FHT level report</b>	<b>4.0</b>	<b>4.0</b>	<b>3.9</b>	<b>3.9</b>
Provider level report	3.2	3.1	2.6	3.6
<b>Team meeting to discuss results</b>	<b>3.9</b>	<b>4.0</b>	<b>4.2</b>	<b>4.0</b>
Meet with other FHTs to discuss	2.7	2.9	3.1	3.1
Public reporting	2.5	2.8	2.6	2.6

# Frequency of Reporting/Feedback

Timing of Feedback



# Interview Findings

- Desire for feedback directed to smaller functional groups (practice sites, professional, disease focused)
- Need for new indicators for some groups: particularly allied health providers working in mental health.
- Little immediate change from feedback. Perception that this needs to be ongoing and takes time.