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Manitoba Centre for Health Policy

Do Specialists provide better  
Quality of Care for Patients with  
chronic disease?

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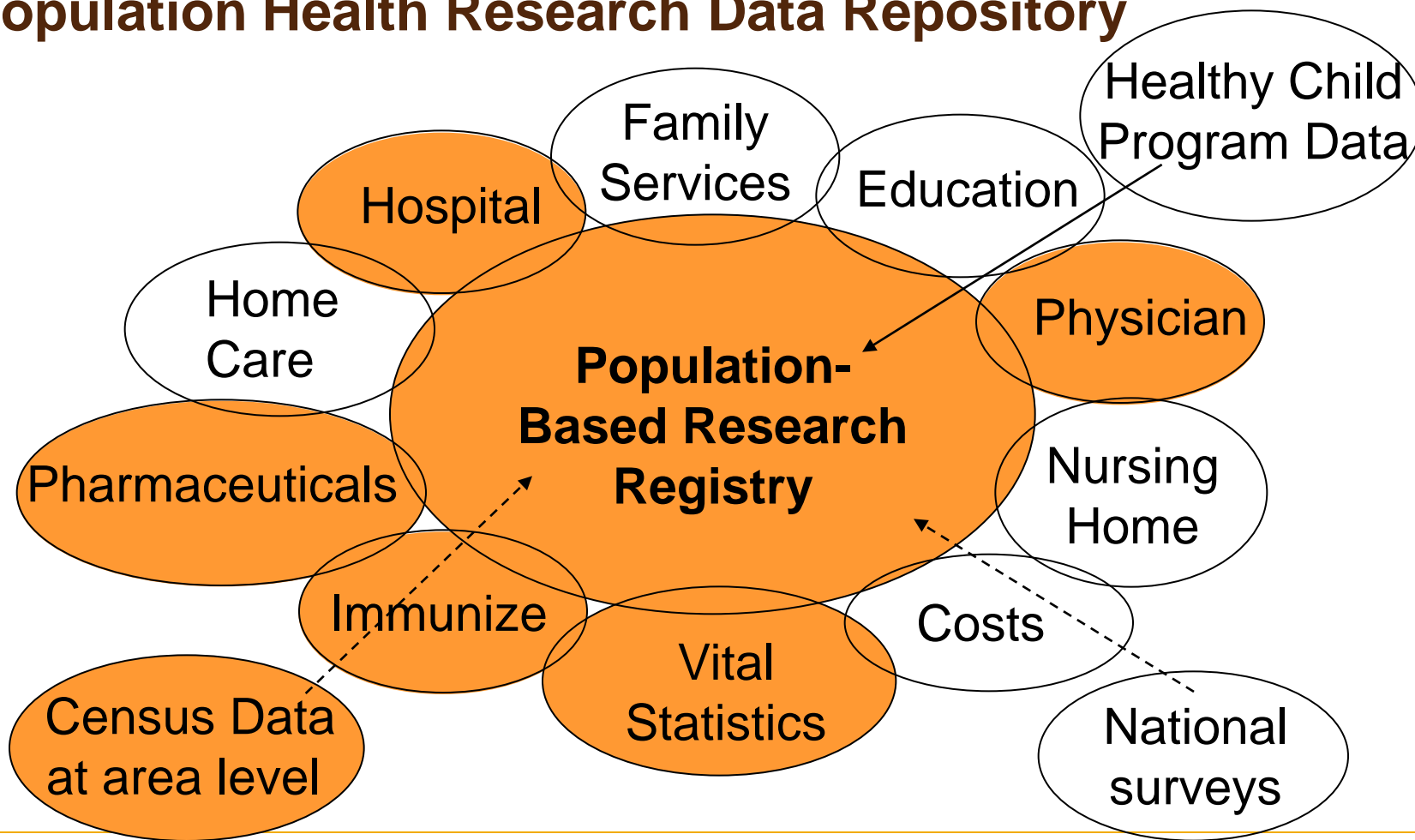
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## Study Objectives

- 1) To describe ambulatory care services provided to patients with chronic disease
- 2) To explore the role played by specialists in the provision of ambulatory chronic disease management
- 3) To describe the impact of the patterns of ambulatory care on the quality of care received by patients with chronic disease

# Design & Setting

## Population Health Research Data Repository



# Index Conditions

- Diabetes
- Hypertension
- Ischemic Heart Disease
- Congestive Heart Failure
- Total Respiratory Morbidity
- Mood Disorders

# Design & Setting

## Cohort

- Patients with any of the 6 conditions
- $n = 347,606$
- Patients were assigned to a “most responsible physician” based on their patterns of care:
  - number of patient visits
  - provision of services (primary care physician or specialist)
  - Specialist visits were categorized as consultations or not
- Cluster analysis was used to explore the patterns of care

# Results

## Chronic Disease Cohort

Number of Conditions	Non-Winnipeg		Winnipeg		Total Number of Patients
	# Patients	% Patients	# Patients	% Patients	
1	79,229	37.26	133,405	62.74	212,634
2	37,297	39.29	57,634	60.71	94,931
3	12,161	39.38	18,720	60.62	30,881
4	3,127	40.81	4,535	59.19	7,662
5	594	42.80	794	57.20	1,388
6	45	40.91	65	59.09	110
<b>Total</b>	<b>132,453</b>	<b>38.10</b>	<b>215,153</b>	<b>61.90</b>	<b>347,606</b>

# Results: Chronic Disease Clusters

Cluster	Cluster Description
1	Patient is assigned to a SP with about 7 visits per year Patient sees other PCPs even more often
2	Patient is assigned to a PCP with about 15 visits per year
3	Patient is assigned to a SP with about 18 visits per year
4	Patient is assigned to a PCP with about 18 visits per year Patient sees other PCPs about the same amount
5	Patient is assigned to a PCP with about 4 visits per year Patient sees other PCPs about the same amount
6	Patient is assigned to a PCP with about 7 visits per year
7	Patient is assigned to a PCP with about 3 visits per year
8	Patient is assigned to a PCP with about 33 visits per year
9	Patient is assigned to a PCP with about 7 visits per year Patient sees SPs about the same amount (no referral)
10	Patient is assigned to a PCP with about 6 visits per year Patient sees other PCPs for 12 visits per year
11	Patient is assigned to a SP with about 4 visits per year
12	Patient is assigned to a SP with about 43 visits per year
13	Patient is assigned to a SP with about 6 visits per year Patient sees other SPs for about 12 per year
14	Patient is assigned to a SP with about 3 visits per year Patient sees PCPs with about 28 visits per year
15	Patient is assigned to a PCP with about 6 visits per year Patient sees other PCPs with about 30 visits per year

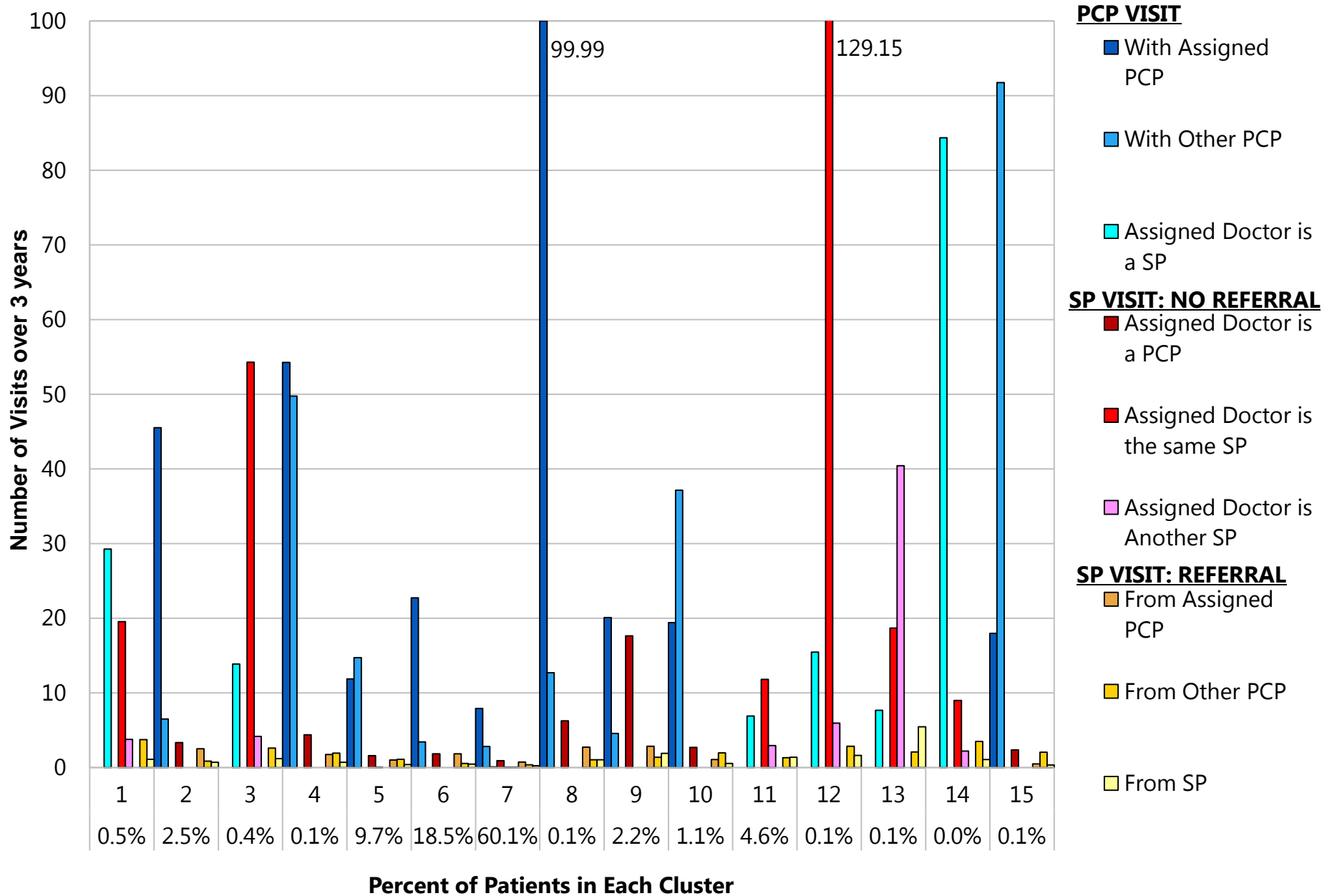
**PCP Clusters: 2, 4, 5, 6, 7, 8, 9, 10, 15**

→ **60%**

**SP clusters: 1, 3, 11, 12, 13, 14 (6% of cohort)**

**PCH residents**

# Results: Chronic Disease Clusters





# Results: Quality Care: Compared to PCP Cluster Group

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Chronic Condition	Good Performance*	Poor Performance*
	Cluster Group**	Cluster Group
<b>Hypertension</b>		
Influenza Vaccination	–	SP & Mixed
Stroke	–	Mixed
Renal Failure	–	SP
Myocardial Infarction	–	–
<b>Total Respiratory Morbidity</b>		
Influenza Vaccination	–	SP & Mixed
Asthma Drug Prescription	Mixed	–
<b>Depression</b>		
Follow-Up Appointment	Mixed	SP
<b>Diabetes Mellitus</b>		
Influenza Vaccination	–	SP & Mixed
Eye Examination	–	Mixed
Lower Limb Amputation	–	–
<b>Ischemic Heart Disease</b>		
Influenza Vaccination	–	SP & Mixed
Beta Blocker Prescription	SP	–
<b>Congestive Heart Failure</b>		
Influenza Vaccination	–	Mixed
ACE-I & ARB Prescription †	Mixed	–

\* only statistically significant results are presented

\*\* Primary care physician (PCP) cluster group: reference group; clusters 2, 6, 7, 8 & 9  
 Specialist (SP) cluster group: clusters 1, 3, 11 & 12  
 Mixed cluster group: clusters 4, 5 & 10

† Angiotensin Converting Enzyme Inhibitor (ACE-I); Angiotensin II Receptor Blocker (ARB)

## Primary care cluster group better than:

- Both other groups for:
  - Influenza vaccination
- Specialist cluster group for:
  - Renal failure, depression F/U
- Mixed cluster group for:
  - Stroke, eye exam

## Discussion

- 31% of all visits to a PCP were not to the assigned PCP
- Some of these were likely to physicians in the same clinic as the assigned PCP
- Patient access to SP care without a referral was relatively rare
- The highest proportion of SP visits with referral was with a referral from a non-assigned PCP

## Discussion

- Referrals from the assigned PCP to a Specialist was infrequent
- Cluster assignment was not related to the number of chronic conditions
- Chronic disease clusters with more specialist visits had a higher proportion of patients living in Winnipeg

## Conclusion

- The vast majority of chronic disease patients see the same primary care physician for most of their care
- Patients who see specialists do not have demonstrably better quality care than those who see family doctors
- Patterns of ambulatory care use also vary significantly by geography and across chronic diseases

## Limitations

- Administrative claims data lack depth
- We did not assign the specific quality indicator to the physician who provided the associated care
- Approximately 20% of physicians are paid via alternate funding plans (30% of visits of this group may be missed)

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## Thank You / Questions

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