

Hospitalizations for Mental Disorders in Ontario

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Presentation outline

□ Reporting hospitalizations for mental disorders

- Discharge Abstract Database (DAD)
- Ontario Mental Health Reporting System (OHMRS) – reporting by all hospitals began April 1, 2006
- Equivalent reporting via DAD vs. OHMRS
- Reporting all mental disorders

□ Diagnoses for mental disorders

- DAD - International Classification of Disease, version 10 (ICD10) vs. OHMRS – Diagnostic and Statistical Manual of Mental Disorders, version 4 (DSM-IV)
- Reporting specific diagnoses
- Example: depression

Reporting from DAD vs. NACRS:

Table 1. Equivalent reporting for mental disorders using DAD and NACRS

DAD – Mental Disorders	OHMRS	Solution
Discharge-based system	Admission-based system	Report discharges from OHMRS (e.g., select by discharge year)
Identifies mental disorders by most responsible diagnosis (MRDx)	All patients have a primary mental health diagnosis	Filter DAD for MRDx = ICD-10 chapter V – Mental Disorders
MRDx for hospitalization is assigned at discharge	Patients are assessed periodically throughout stay – Primary DSM-IV category/Axis I can change between assessments	For analyses by diagnosis, in OHMRS, the primary diagnosis at discharge assessment is used (considered to be closest to MRDx) – excludes short stays (no discharge assessment) and some stays with a short discharge assessment
Includes any patient with a mental disorder MRDx not occupying an adult acute psychiatric bed	Includes any patient occupying an adult acute psychiatric bed – could include children	For all age groups, OHMRS and DAD data should be combined
Includes hospital types other than acute	Only includes acute adult psychiatric	In the DAD, filter for hospital type = AP, AT (note: as of 2006 fiscal, AP not longer exists)

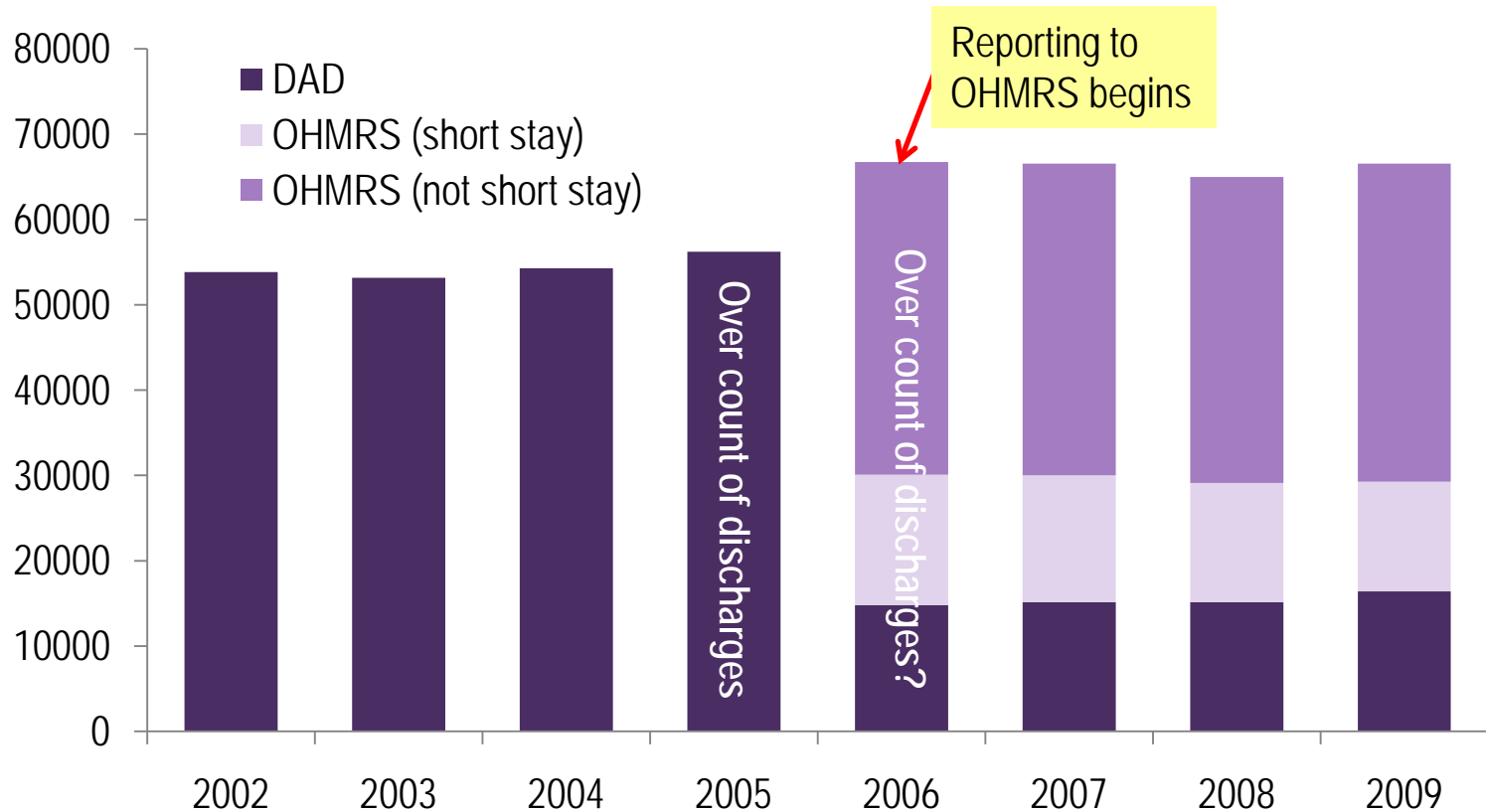
Data sources in *intelli*HEALTH:

Table 2. Reporting mental disorders from DAD and NACRS: data items and data sources

Reporting Mental Disorders	DAD – Data Item/Source	OHMRS – Data Item/Source
All mental disorders (e.g. total mental disorders by age group, sex)	ICD-10 Chapter V <i>Inpatient Discharge Main Table</i>	All discharges <i>Adult Mental Health Main Table</i>
Diagnosis groups (i.e. reporting major categories/groups of mental disorders)	ICD10 Chapter V Blocks <i>Inpatient Discharge Main Table</i>	DSM-IV Axis I Primary Dx Category <i>Adult MH Diagnosis, Treatment & Assessment</i>
Specific diagnoses (e.g. depression)	Filter on: ICD10 codes <i>Inpatient Discharge Main Table</i>	Filter on DSM-IV Axis I Primary codes <i>Adult MH Diagnosis, Treatment & Assessment</i>

Reporting all hospitalizations

Figure 1. Acute care hospitalizations for mental disorders, by data source – Ontario, 2002/03 – 2009/10 fiscal year



Mental disorders: DAD = MRDx ICD10 chapter V; OHMRS = all discharges with discharge assessment
 Data sources: DAD, OHMRS (CIHI), Intellihealth, MOHLTC

Diagnoses for mental disorders: DSM-IV versus ICD-10:

Table 3. Frequency in enriched sample and percentage concordant for the main ICD-10 and DSM-IV mental disorders

Disorder	ICD-10 frequency (%)	DSM-IV frequency (%)	Per cent Concordant ¹
Dysthmia	3.4	3.1	87
Depressive episode	16.6	15.6	83
Substance dependence	7.6	8.5	77
Generalized anxiety disorder	9.9	10.1	77
Social phobia	12.9	10.5	66
Agoraphobia with panic disorder	3.9	4.3	66
Obsessive-compulsive disorder	1.9	2.7	64
Panic disorder	6.1	4.1	56
Agoraphobia without panic disorder	3.1	3.9	45
Post-traumatic stress disorder	6.9	3.0	35
Substance harmful use or abuse	8.4	8.6	33
Any mental disorder	37.0	31.9	68

¹ The percentage of people positive on either classification who are positive on both.

Andrews G, Slade T, Peters L. Classification in psychiatry ICD-10 versus DSM-IV, *British Journal of Psychiatry* (1999), 174, 3-5.

Diagnosis example: depression

OHMRS

Filters = Assess FYr equal to 2009 AND

(DSM-IV Axis I Primary Dx Code ONLY equal to 29621, 29622, 29623, 29624, 29631, 29632, 29633, 29634, 29636, 29630 OR

DSM-IV Axis I Primary Dx Code ONLY (2) matches pattern 311%) AND

Assess Type = DISCHARGE

Measure = # discharges (D) – relabeled from # admits (D)

DAD

Filters = FYear equal to 2009 AND

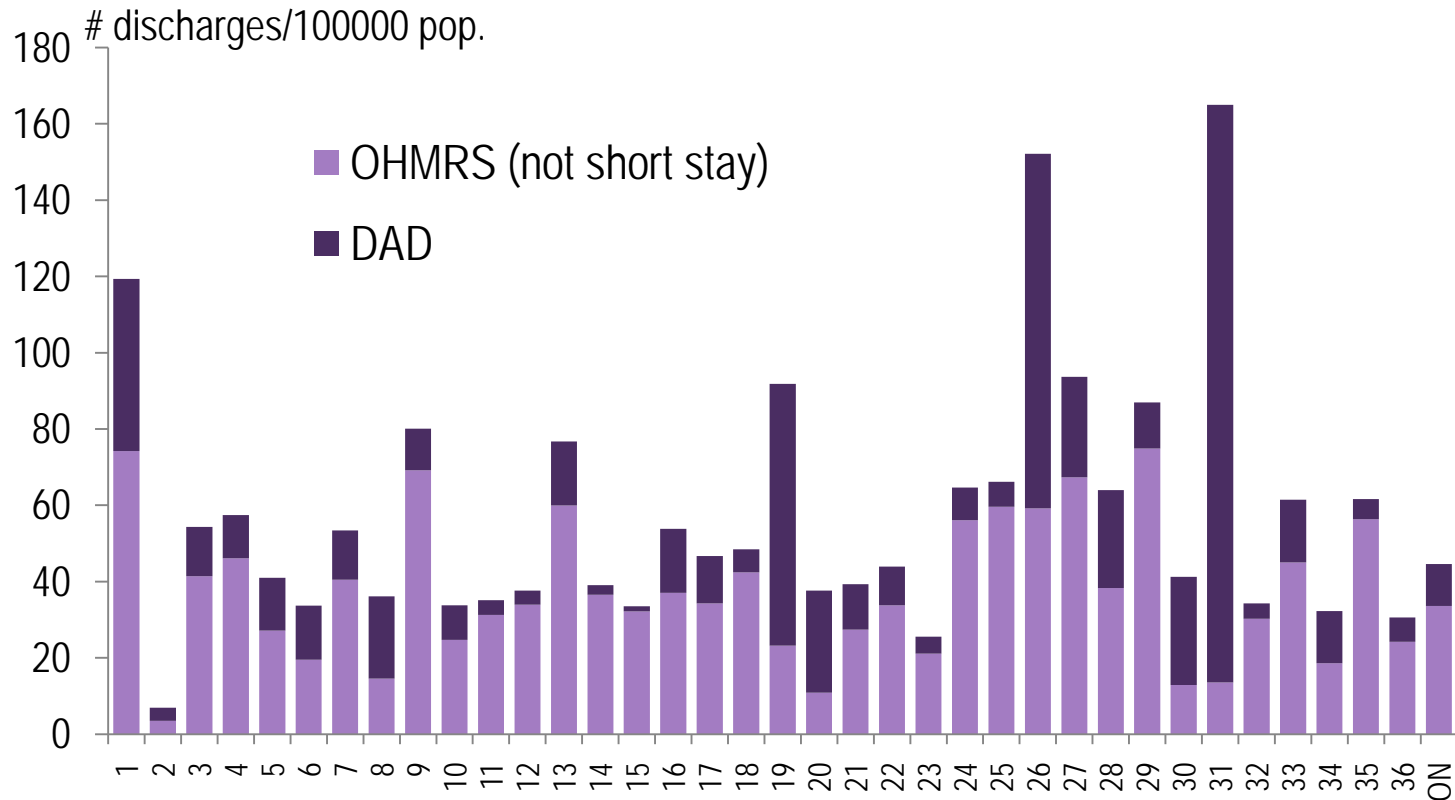
Hospital Type equal to AT, AP AND

ICD10 Code (3 char) ONLY MRDx equal to F32, F33

Measure = # discharges

Hospitalizations for depression

Figure 1. Acute care hospitalizations for depression, by data source and PHU (numbered alphabetically) – Ontario, 2009/10 fiscal year



Depression: see slide 9 for diagnosis criteria

Data sources: DAD, OHMRS (CIHI), Intellihealth, MOHLTC

Questions?

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Appendix A: PHU legend for Figure 2:

Algoma	1	Northwestern	20
Brant	2	Ottawa	21
Chatham-Kent	3	Oxford	22
Durham	4	Peel	23
Eastern Ontario	5	Perth	24
Elgin-St Thomas	6	Peterborough	25
Grey-Bruce	7	Porcupine	26
Haldimand-Norfolk	8	Renfrew	27
Haliburton Kawartha Pr	9	Simcoe Muskoka District Health	
Halton	10	Unit	28
Hamilton	11	Sudbury	29
Hastings Prince Edward	12	Thunder Bay	30
Huron	13	Timiskaming	31
Kingston Frontenac L & A	14	Toronto	32
Lambton	15	Waterloo	33
Leeds,Grenville,Lanark	16		
Middlesex-London	17	Wellington-Dufferin-Guelph	34
Niagara	18	Windsor-Essex	35
North Bay Parry Sound District		York Region	36
Health Unit	19	Ontario	ON

Appendix B: references for DAD and OHMRS

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IntelliHealth User Guides

Attachment	Size
IntelliHEALTH ONTARIO Training Manual v5.6.3 .pdf	10.25 MB
04-Ambulatory Visits User Guide V1.0.pdf	386.08 KB
05-Inpatient Discharge User Guide V1.0.pdf	361.4 KB
08-Home Care User Guide V 1.0.pdf	590.97 KB
12-Inpatient Mental Health User Guide Final V 1.0.pdf	253.71 KB

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