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The Cost Of Functional Dyspepsia Results From A Large US Employer Database

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Presentation Outline

- Background on Functional Dyspepsia (FD)
- Study Objective
- Study Methodology / Database Descriptor
- Study Results
- Conclusion and Application

Background - Functional Dyspepsia

- Epigastric pain or burning, postprandial fullness or early satiation, and no evidence of structural disease¹
- Diagnosis of exclusion, vague condition to diagnose and treat
- Approximately 25% of the population experiences symptoms consistent with dyspepsia accounting ~5% of the 560 million office visits in the US

Tack J, et al. *Gastroenterology* 2006;130:1466-79.

Background - Functional Dyspepsia

- £450 million spent on prescribing anti-secretory medications^{1,2}
- Non-ulcer dyspepsia (NUD) cost-effective if payers are willing to pay \$517/mo free from dyspepsia³
- 47/1000 population annual frequency of FD consultations in Sweden⁴
- \$US 113,630/1000 annual cost for FD in Sweden⁵

1 Ryder SD, et al. BMJ 1994;308:827-30.

2 Nyren O, et al. 1985

3 Moayyedi P, et al. Gastroenterology 2004;127:1329-1337.

4 Moayyedi P, et al. Cochrane Collaboration 2005.

5 Nyren et al, 1992

Objective

- To assess the economic burden of FD associated with medical costs and work loss from an employer perspective

Methodology

- Person-centric database containing costs from multiple large geographically diverse US based employers
- Timeframe 2001-2004
- Claims data included pharmacy, medical, short- and long-term disability (STD, LTD), sick leave (SL), and productivity measurements

Methodology (cont)

- Comparisons were made between FD employees (ICD-9 536.8) and employees without FD
- Multiple regression techniques adjusting for differences in demographics, job-related variables, and Charlson Comorbidity Index (except for medical)
- Only employees eligible for each specific benefit were included in the models for that benefit. Lost time costs include all costs from claims open at some point during the year following the index date.

Results

- 1,669 employees with FD and 274,206 employees without FD
- FD costs (\$3,676/employee/yr) twice as high for direct medical and work absence measures (P<0.0001)
- Medical and pharmacy costs were \$3420 and \$365 for FD (P < 0.0001)

Results (cont)

- Work absence costs were SL \$103 ($P < 0.0001$), STD \$104 ($P = 0.0370$), LTD \$7 ($P=0.6551$)
- Measured units of productivity were 2 units less/hour with the FD group ($P=0.055$)

Results (cont)

AHQR Categories*	Employees with FD	Employees without FD
Abdominal pain	46.5%	8.2%
Other GI disorders	28.1%	4.7%
Abdominal pain screening suspected conditions	27.5%	20.3%
Medical exam requiring further evaluation	24.2%	15.9%
Residual codes ill defined symptoms	21%	11.6%
Non-specific chest pain	20%	7%
Unknown diagnosis	19.8%	11.3%

Results (cont)

AHQR Categories*	Employees w/FD
Abdominal pain	\$308
Biliary tract disease	\$299
Coronary atherosclerosis	\$228
Stomach/duodenum disorders	\$188
Esophageal disorders	\$166
Gastritis and duodenitis	\$163
Non-specific chest pain	\$139

*p<0.05

Study Limitations

- Retrospective review
- Timeframe of diagnosis
- Claims processing errors

Conclusions

- FD patients have a variety of symptoms and their management is complex
- Confirms earlier work from Sweden, but shows that in the US, FD can be costly to employers
- Physicians need more education on the ROME III criteria
- Greater integration of this information into improving medical and pharmaceutical costs

??? QUESTIONS ???

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