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# A PROSPECTIVE "BOTTOM UP" STUDY OF THE DIRECT PERSONAL AND INVESTIGATION COSTS OF FAECAL INCONTINENCE IN AMBULATORY MEN AND WOMEN IN RELATION TO SEVERITY.

## Hypothesis / aims of study

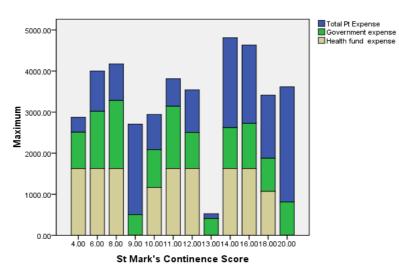
Although there have been a few of studies regarding the cost of faecal incontinence in the past decade, these studies mainly employed previously collected databases [1, 2], or focused upon inpatients [3], subjects with constipation as the main complaint[1], women with faecal incontinence after obstetric injury. Few conducted face to face direct enquiry of the personal costs of leakage of faeces [3]. Most did not employ a validated measure of severity [1]. Thus we aimed to conduct personal interviews with a broad sample of ambulatory home dwelling patients who presented with faecal incontinence to a tertiary Unit, and to collect cost data prior to the onset of treatment in relation to baseline severity.

### Study design, materials and methods

A consecutive series of patients attending a tertiary outpatient clinic with a main complaint of faecal incontinence were interviewed, using a 3 page questionnaire, modelled on the DBICI questionnaire for urinary incontinence [3]. Interviews were conducted face to face, taking approximately 15 minutes each. The information collected included basic personal hygiene costs (pads, laundry, wipes, cleansers), medication costs (loperamide, creams & stool bulking agents etc) and diagnostic costs (including medical attendance, anorectal physiology, colonoscopy). Following each interview, the personal hygiene items used by patients were costed from known tables compiled by visiting local pharmacies and suppliers. These costs were further broken down into personal "out of pocket" expenses, Medicare subsized costs, and health fund rebated expenses, over the last 12 months. Costs were recorded in AU dollars. Also at this visit, the patients completed a St Mark's score to gauge severity of faecal incontinence (max score 24).

## Results

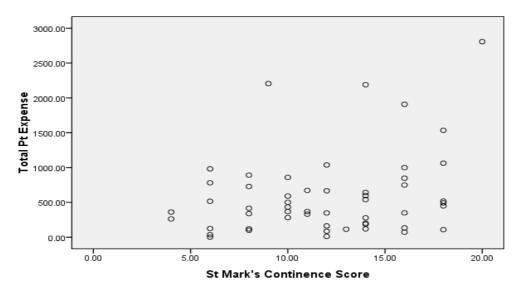
A sample of 54 consecutive patients [5 male, 49 female, age 35 – 91, median 69.42, IQR 61.48–73.98] performed the Faecal Cost Questionnaire and the St Mark's score. Figure 1 shows breakdown of all personal and investigation costs in relation to whether a Medicare subsidy (black), private health (grey) or "out of pocket" (silver) costs were sustained.



#### Figure 1. Histogram of Incontinence expense by severity group

In terms of patient "out of pocket" costs, the major expense overall was for pads and personal hygiene items (median 70.89 per annum, IQR 0.63-310.68). The bulk of Medicare costs included medical consultation and rebates for physiology testing and endoscopy (median \$576.92). Figure 1 above showed no relationship between these overall costs and incontinence severity. Therefore we analysed the subset of Personal Costs alone, since we hypothesized that these costs should directly relate to severity.

Figure 2. Total personal costs vs incontinence severity St Mark's score



The Spearman rank correlation showed no significant relation between total personal costs and severity (r=0.21). When we drilled down into the costs just for pads and creams alone, a relationship became apparent (r=0.34, p=0.5).

#### Interpretation of results

In this face to face study of personal and medical costs of patients presenting for the first visit with faecal incontinence, the Total Costs of all personal items and investigations (regardless of the Payer) did not directly relate to severity. This arises because the costs of investigation are largely fixed.

However, the total Personal Costs of hygiene items increased with severity of incontinence, as would be expected. Patients often reported during their interviews that they wore pads "just in case".

#### Concluding message

To our knowledge, this is the first report of detailed costs for faecal incontinence in ambulatory home-dwelling men and women, obtained by personal interview. The relationship between severity and expense is indeed multifactorial, and reflects the sufferer's fear of potential leakage rather than actual necessity.

#### References

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Was informed consent obtained from the patients?	Yes