WAITING TIMES FOR NEW APPOINTMENTS AT SPECIALIST OUTPATIENT CLINICS (SOC) IN RESTRUCTURED HOSPITALS

ORTHOPAEDIC SURGERY

By Lien Wen Di

ABSTRACT

This paper presents waiting times experienced by subsidised patients seeking their first outpatient appointment at specialist outpatient clinics (SOC) for Orthopaedic Surgery in restructured hospitals.

INTRODUCTION

The specialty of Orthopaedic Surgery deals with disorders of the bones and joints such as fractures and dislocations, tumors of the bones and muscles, deformities and degenerative diseases.

This paper presents the attendance volumes in 2006, and waiting times for new appointments made by subsidised patients at orthopaedic Specialist Outpatient Clinics of restructured hospitals for the period of April – June 2007.

ATTENDANCES AT SPECIALIST OUTPATIENT CLINICS

Market Share

In 2006, 259,908 subsidised attendances were seen at orthopaedic SOCs in SGH, CGH, TTSH, NUH, AH and KKH. Orthopaedic SOCs saw the third highest volume of subsidised

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1 Lien Wen Di is a Research Analyst with the Health Information Division, MOH.

2 MOH collects statistics on waiting times experienced by patients making new appointments at SOC, as a measure of the SOC’s capacity to attend to new patients. MOH defines the waiting time for a new SOC appointment as the number of calendar days from the date when the patient first requested for an appointment, to the appointment date allocated for doctor consultation. For this purpose, the waiting time statistics exclude waiting times of patients who rejected the earliest / first available appointment date offered to them; walk-in patients; and those referred from the Emergency Department who receive medical consultation within the same day. Waiting times for follow-up appointments are also excluded.

3 SOC patients are accorded subsidy if they are referred from polyclinics.

4 Specialist Outpatient Clinics (SOC) cater to patients who require specialist care but who do not need to be admitted as inpatients for clinical attention. SOC patients at restructured hospitals may either be self-referred or referred from general practitioners, polyclinic doctors or specialists in the private and public sectors. Consultations are by appointment only, and patients are charged subsidised or private rates, depending on the source of referrals.
attendances among various specialties. Majority of the cases seen were repeat attendances (74.8%). See Table 1.

Table 1: New and Repeat SOC Attendances (Subsidised) for Orthopaedic Surgery by Institutions, Year 2006

<table>
<thead>
<tr>
<th>Institution</th>
<th>Subsidised Attendances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>Repeat</td>
</tr>
<tr>
<td>SGH*</td>
<td>16,787</td>
<td>53,837</td>
</tr>
<tr>
<td>CGH</td>
<td>13,492</td>
<td>44,386</td>
</tr>
<tr>
<td>TTSH</td>
<td>12,963</td>
<td>43,704</td>
</tr>
<tr>
<td>NUH*</td>
<td>10,109</td>
<td>27,353</td>
</tr>
<tr>
<td>AH</td>
<td>11,840</td>
<td>24,912</td>
</tr>
<tr>
<td>KKH**</td>
<td>251</td>
<td>274</td>
</tr>
<tr>
<td>Overall</td>
<td>65,442</td>
<td>194,466</td>
</tr>
</tbody>
</table>

SGH had the largest share (27.2%) of total attendances, followed by CGH (22.3%) and TTSH (21.8%). Other institutions such as NUH (14.4%) and AH (14.1%) had relatively smaller shares. KKH which started offering orthopaedic surgery for women recently in 2005 had 0.2%. Please see Chart 1.

Chart 1: SOC Attendances (Subsidised) for Orthopaedic Surgery by Institutions, Year 2006

New attendances as

- % of all new attendances in public sector hospitals

There were 65,442 new subsidised attendances in 2006, which made up 25.2% of total attendances. SGH saw a quarter of new attendances (25.7%), while other institutions (except for KKH) saw between 15% to 20% of new attendances. (See Chart 2.)
% of all attendances in each hospital

KKH had the highest proportion of new attendances (47.8%) within its total volume of attendances, followed by AH (32.2%) and NUH (27%). The proportion of new attendances in CGH, TTSH and SGH was between 23%-24%.

Rising Attendances

From 2002 to 2006, subsidised attendances grew by 18.9%. This represents a compounded annual growth rate (CAGR) of 4.4% per year. Attendances grew fast at 13.6% in 2002, but slowed down to 4.1% in 2005 and 2.2% in 2006. (See Chart 3.) Repeat attendances (CAGR 5.2%) grew faster than new attendances (CAGR 2.2%).
Overall, from 2002 to 2006 total attendances grew fastest at AH (8.9% CAGR) and NUH (5.7% CAGR), driven by strong growth in both new and repeat attendances. Total attendances at SGH, CGH and TTSH grew largely because of repeat attendances (See Chart 4 and Table 2)

- new attendances grew fastest at institutions with smaller market shares - AH (9% CAGR) and NUH (7.8% CAGR). New attendances at institutions with larger market share, such as CGH and TTSH fell into negative growth, while SGH’s new attendances grew marginally by 0.8%.

- Repeat attendances grew fastest at AH (8.9% CAGR), with TTSH (5.7% CAGR), CGH (5.2% CAGR), and NUH (4.9% CAGR) having comparable growth rates. SGH’s repeat attendances grew slowest (3.4%).

Chart 4: Annual SOC Attendances (Subsidised) for the Orthopaedic Surgery by Institutions, Year 2002-06

Table 2: CAGR (%) Growth of New and Repeat SOC Attendances (Subsidised) for Orthopaedic Surgery by Institutions, 2002-06

<table>
<thead>
<tr>
<th>Institution</th>
<th>Subsidised Attendances</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>Repeat</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>SGH</td>
<td>0.8%</td>
<td>3.4%</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>CGH</td>
<td>-2.2%</td>
<td>5.2%</td>
<td>3.2%</td>
<td></td>
</tr>
<tr>
<td>TTSH</td>
<td>-0.4%</td>
<td>5.7%</td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>NUH</td>
<td>7.8%</td>
<td>4.9%</td>
<td>5.7%</td>
<td></td>
</tr>
<tr>
<td>AH</td>
<td>9.0%</td>
<td>8.9%</td>
<td>8.9%</td>
<td></td>
</tr>
<tr>
<td>KKH</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td></td>
</tr>
</tbody>
</table>

Note: *KKH has only data for 2005 – 2006.
Managing Repeat Attendances

The growth in repeat attendances across all institutions underscore the challenges faced by orthopaedic SOCs in persuading patients with chronic conditions to accept discharge to primary care, or proactively self-manage their conditions through observing a strict regime of regular rehabilitative or preventive exercises. Once diagnosed by a specialist, many common and degenerative conditions such as arthritis or back pain (while not being serious enough to warrant surgical intervention) could be monitored and managed adequately at primary care level or through physiotherapy.

Aging Population

The demand for orthopaedic treatment is likely to increase as the population ages.

A study of subsidised attendances in orthopaedic SOCs in 2006 showed that from age 40 and onwards, the volume of attendances (subsidised) per 1,000 residents increases steeply with age. Those in the 65-69 years age band generate at least three times the attendances per 1,000 residents compared to those in the younger 40-44 years age band. The peak in the 20-24 age group is likely to be due to sports related injuries.

Chart 5: Profile of Total Attendances (subsidised) per 1000 Singapore Resident Population, 2006

The group of patients of age 40 years and above generate about 60% or the bulk of all subsidised attendances at orthopaedic SOCs. The attendances from this group of patients (aged 40 and above) has been growing at 9.8% (CAGR) from 2002 to 2006, and their share of attendances have enlarged gradually from 57.5% in 2002 to 62.1% in 2006. See Table 3.

Table 3: Age Composition of (subsidised) Total Attendances, 2002-06

<table>
<thead>
<tr>
<th>Total Attendances at government restructured hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>0 ~ 39</td>
</tr>
<tr>
<td>(82,287)</td>
</tr>
<tr>
<td>40 +</td>
</tr>
<tr>
<td>(111,443)</td>
</tr>
</tbody>
</table>
WAITING TIMES FOR NEW SOC APPOINTMENTS

The median\(^5\) and 90\(^{th}\) percentile waiting times experienced by subsidised patients seeking their first appointments in the second quarter of 2007 are plotted in Chart 6 below; with institutions ranked in descending order of median waiting times.

Median waiting times ranged from 20 days at KKH and AH, to 39 days at NUH, while 90\(^{th}\) percentile waiting times ranged from 27 days at AH to 125 days at TTSH.

KKH and AH were able to see most of their patients within a month, while CGH, SGH and TTSH were able to see half of their patients within one month.

ORTHOHAEDIC SURGEONS

The number of orthopaedic surgeons registered in Singapore grew by 30\% from 98 at end 2002 to 127 at end 2006. In the public sector, the number of orthopaedic surgeons also grew by 31\% - from 62 at end 2002 to 81 at end 2006. See Chart 8.

\(^5\) Median = 50\(^{th}\) Percentile
There are 28 doctors currently undergoing training to be orthopaedic surgeons. We can anticipate a greater increase in the number of orthopaedic surgeons, given the revision to registration requirements for foreign-trained doctors.

**Physiotherapists and Occupational Therapists**

Orthopaedic surgeons often refer their patients to physiotherapists or occupational therapists in their institutions to help the patients to rehabilitate for recovery or to manage chronic conditions. To meet rising demand, the public sector has also increased its number of physiotherapists by some 8% from 191 at end 2002 to 206 at end 2006. The number of occupational therapists grew even more by 16% from 96 to 111 over the same period. Together, the group of physiotherapists and occupational therapists grew by 10% over the past 5 years. See Chart 9.

Note: Figures are based on FTE, rounding up to the nearest whole number.
CONCLUDING REMARKS

Orthopaedic surgery departments in the public sector saw the third highest volume of subsidised attendances among various specialties in 2006.

Subsidised attendances have been rising over the past 5 years, with repeat attendances rising much faster than new attendances. As repeat attendances crowd out the availability of time slots for new attendances, this has led to prolonged waiting times for new appointments.

With an aging population, we can expect subsidised attendances to further increase as those in the older age bands have a greater need for orthopaedic treatment.

Institutions with a smaller patient base such as KKH or AH saw most new appointments within a month. Waiting times were longer at institutions which had higher volume of attendances and higher proportion of repeat attendances, such as SGH, TTSH and CGH. These institutions managed to see half of their patients within one month.

Orthopaedic surgeons in public sector face the challenge of discharging patients with long-term conditions to primary care, physiotherapy or self-managed care where their conditions can still be managed adequately, so as to free up time slots to see patients with new conditions.

Apart from employing more orthopaedic surgeons, physiotherapists and occupational therapists in the public sector to meet rising demand, patients themselves play an important part in ensuring appropriate utilisation of specialist care by understanding their condition well, and proactively managing their condition through a disciplined regime of rehabilitative exercises.

Feedback to MOH

If you have any comments or questions on the information paper, you can either email us directly at moh_info@moh.gov.sg. Alternatively, you can also fax or write to us at:

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