Applications and secretariat workload at the University of the Witwatersrand Human Research Ethics Committee (Medical) 2002-2011: A case study

P Cleaton-Jones, MB BCh, PhD, DSc (Dent), FCD
Steve Biko Centre for Bioethics, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg

Corresponding author: P Cleaton-Jones (pcleaton-jones@gmail.com)

Objective. To examine trends in the numbers of new applications for ethics clearance of health research and associated research ethics committee secretariat activity.

Methods. Data were obtained from research ethics committee secretariat databases with ethics approval.

Results. General research applications increased from 440 in 2002 to 685 in 2011, all handled by one full-time staff member. This load is expected to increase by 250 per year for 2012, 2013 and 2014 before reaching a plateau. This new applications load per year is based on registered clinical postgraduates at the University of the Witwatersrand in a 4-year specialisation who must comply with the new Health Professions Council of South Africa requirement for completion of Master’s level research in order to register as a clinical specialist. Sponsored clinical trials have remained and should remain at approximately 100 per year but require three staff members to attend to this workload.

Conclusion. The increased workload is a serious challenge and has to be tackled first by increasing the administrative staff number.

In 2002 the number of applications per month was almost even (33 - 49) with a mean of 40 per meeting. In contrast, the range in 2011 was 41 - 94 (mean of 62 per meeting) but with an irregular pattern during the year (Fig. 2), with peaks in April, September and November influenced by departmental policies, research deadlines and a desire to begin projects early in the new year. In Fig. 2, the expedited applications are retrospective clinical record audits assessed in advance of a meeting by a Chair and one member, who provide a written report at the meeting for approval, which saves approximately a third of possible meeting time. The applications that are discussed (the second plot from the top) are the total applications less the expedited ones and occupy the majority of each meeting, which normally lasts from 12:30 to 17:30.

Wits Health Consortium Ethics Division

This secretariat is based at the Wits Health Consortium, about 1 km west of the medical school; it is staffed by three full-time employees. This secretariat operates in the same broad way as that in the WRO, with the same closing date for applications, and the same Wits application form with some minor modifications to suit clinical trials. However, an important difference is that applicants must pay specified charges for the management of an application as well as for any subsequent amendments (see www.witshealth.co.za/ethics).

Despite receiving a lower number of submissions per year than the WRO receives, the WHCED secretariat has a heavy workload because of the administrative requirements for clinical trials specified by the Medicines Control Council in South Africa, the Food and Drug Administration in the USA, and other regulatory bodies elsewhere. Any change in a research proposal or information sheet or consent form, regardless of the extent, has to be approved through the secretariat. The complexity of the clinical trials produces many queries from members of the ethics committee to investigators and sponsors regarding the design or conduct of a trial. These must be scrutinised and approved by either one or more Chairs or reviewers or by the full HREC (Medical). Also, a close watch has to be kept on complaints and queries from participants in trials. The WHCED uses an advanced database to track applications and anything arising from them. The secretariat must keep this up to date and it is used for minutes of meetings as well as preparing lists of matters such as serious adverse events (SAEs). The Chair comes to the secretariat offices three mornings a week to sign letters, forms, help with queries, and so on. Staff members prepare documents for this in advance.

To illustrate workload in the WHCED, Table 1 shows five types of activity captured in the secretariat database for 2002 - 2011. For this article these have been grouped into ‘documents for decisions’ (initial clinical trial application evaluation, scrutiny of trial amendments and responses to queries) and ‘other documents’ (all acknowledgements and SAEs).

Fig. 3 shows X-Y plots of the three ‘documents for decisions’ frequencies by year considered. The numbers of clinical trials per year fluctuate slightly around 100. There is a highly statistically significant increase in amendments shown by the upper dotted regression line (F=76.65, p<0.0001). The middle fine-dotted line is a linear regression line for queries which, although upwards, has no statistical significance. Reasons for the significant increase in
amendments are the complexity of modern clinical trials and legal requirements to have every alteration approved by a research ethics committee.

The frequency X-Y plots for the ‘other documents’ are shown in Fig. 4. The rapid fall in SAEs is explained by a change in recording SAEs. Years 2003 and 2004 included international SAEs; from 2005 only South African SAEs have been recorded. Allied to this, international SAEs were not individually acknowledged but all South African ones were. After 2005 the rates have little variation.

**Discussion**

**Current WRO workload**

The current turn-around time in 2011 in this office was slower than in previous years, so frustration of applicants is understandable. The reason is that the workload for the single full-time staff member is now excessive – Table 2 lists the many responsibilities involved.

What needs to be understood is that besides handling new applications, about 60% of reviewed applications have to be revised (Table 3). In a 1-year study sample of 586 applications (April 2008 - March 2009), 369 (62%) needed revisions or full re-application. The proportions of process errors in these 369 applications were procedural violations 10%, missing information 43%, slip-ups 15%, discrepancies 7%, consent 55%, confidentiality 17%, study sample 15% and legal 3%.

An estimate of the number of applications needing revision for 2011 is therefore 411/685. Experience has shown that when revisions are required, these are provided by applicants within 3 months of the initial month in which the application was considered, so that in addition to all the work associated with new applications there is a background of about 100 revised applications per quarter to be attended to.

Why have applications increased since 2002? The perceived reasons are:

- increased undergraduate research requirements by medical school departments in which new courses/degrees have been introduced since 2005 (Graduate Entry Medical Programme, Bachelor of Health Sciences, and Bachelor of Clinical Medical Practice)
- change in Health Professions Council of South Africa (HPCSA) policy from 2011 for registration as a clinical specialist: ‘...All specialist trainees will be required to complete a relevant research study …’
- increased pressure from the university to do more research towards the Wits Strategic Plan for 2020 to be one of the world’s top 100 research universities.

Typical complaints from applicants to the Chair include:

- ‘I phoned the Research Office, no-one is ever there’
- ‘I submitted my application last week (… month) and have not yet heard a decision’
- ‘When will I receive my clearance certificate?’, and so on.

**Table 1. Frequency distribution of WHCED secretariat activities by year**

<table>
<thead>
<tr>
<th>Year</th>
<th>Clinical trial applications</th>
<th>Amendments</th>
<th>Queries</th>
<th>Acknowledgement</th>
<th>SAEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>99</td>
<td>171</td>
<td>273</td>
<td>1 123</td>
<td>2 530</td>
</tr>
<tr>
<td>2003</td>
<td>102</td>
<td>364</td>
<td>362</td>
<td>1 015</td>
<td>3 162</td>
</tr>
<tr>
<td>2004</td>
<td>103</td>
<td>351</td>
<td>371</td>
<td>2 317</td>
<td>997</td>
</tr>
<tr>
<td>2005</td>
<td>110</td>
<td>512</td>
<td>543</td>
<td>3 253</td>
<td>1 187</td>
</tr>
<tr>
<td>2006</td>
<td>85</td>
<td>492</td>
<td>406</td>
<td>3 382</td>
<td>1 401</td>
</tr>
<tr>
<td>2007</td>
<td>85</td>
<td>440</td>
<td>282</td>
<td>3 063</td>
<td>1 413</td>
</tr>
<tr>
<td>2008</td>
<td>109</td>
<td>557</td>
<td>471</td>
<td>3 714</td>
<td>947</td>
</tr>
<tr>
<td>2009</td>
<td>92</td>
<td>662</td>
<td>451</td>
<td>2 860</td>
<td>791</td>
</tr>
<tr>
<td>2010</td>
<td>105</td>
<td>708</td>
<td>597</td>
<td>2 583</td>
<td>624</td>
</tr>
<tr>
<td>2011</td>
<td>102</td>
<td>813</td>
<td>590</td>
<td>2 872</td>
<td>826</td>
</tr>
<tr>
<td>Total</td>
<td>992</td>
<td>5 070</td>
<td>4 346</td>
<td>26 182</td>
<td>13 878</td>
</tr>
</tbody>
</table>

Fig. 4. X-Y plots for the frequency of ‘other documents’ by year.
With only one person in the WRO there is no one to answer the telephone if the single staff member goes to photocopy, to fetch a file from registry, or meet the Chair at medical school or the WHC. The single most common reason for delay of a decision is writing the meeting minutes – no certificate is released until the minutes have been checked by one of the Chairs (applicants often do not understand that the clearance certificate is a legal document, and so must be accurate). Minute writing is time-consuming, especially when there are as many as 94 applications for one meeting (April and November 2011) and interruptions by visits or telephone calls from applicants delay the writing.

Another common reason for applicants not receiving a decision or clearance certificate is provision of an incorrect contact e-mail or address or telephone number on the application form (for example a home address only used by individuals during university vacations).
The expectation of many applicants is that they will know the outcome of their application on the first working day after a meeting, in spite of a notice in the application form that the earliest will be 10 - 14 working days after a meeting.

**Current WHCED workload**

At present the WHCED, with three full-time staff, is coping with its workload, albeit at full stretch. Having multiple staff ensures cover when a staff member is away for any reason. The typical new application rate of approximately 100 new clinical trial applications per year is expected to continue, as is the increasing number of amendments.

**Combined statistics for WRO and WHCED secretariats**

Fig. 5 shows X-Y plots for the frequencies of new applications to both the WRO and the WHCED, which shows the lower absolute frequency in the WHCED. This, however, is misleading. The amount of work per clinical trial is, in my opinion, six times that per general research application; this is illustrated in the plot of the estimated WHCED/WRO equivalent in office work. The rates in the two offices are then similar but what is handled by a single staff member in the WRO requires three staff in the WHCED.

When should an applicant expect a decision from a research ethics committee?

This is a matter of concern to every applicant worldwide. An Internet search produces a mass of regulations for obtaining ethics approval for research projects of many types, from interventional clinical trials to innocuous epidemiological information collection – but with vague mention of time scales. Here are three insights.

1. There are no figures to provide for the WRO – this information would have to be manually determined, which is not possible under present staffing. However, for retrospective record reviews of the type generally done by undergraduates and MMed candidates, a clearance for one of these projects approved through the ‘expedited’ method can be issued within 5 working days, because the written assessments presented to the HREC (Medical) are the final minutes for those applications.

2. At Wits, uncomplicated decisions on new clinical trials are generally completed within a month of submission through the WHCED; when there are queries this takes longer. A New Zealand Clinical Research Organisation says clinical trial application decisions in that country should take 2 - 3 months.6

3. For research electives the Human Research Ethics Committee of the Faculty of Health Sciences at the University of Cape Town recommends that planning with a supervisor should begin at least 6 months ahead to allow for ethics approval, and travel to South Africa should take place before this approval.7 Uncomplicated applications to the UCT FHS HREC (with three staff) take approximately 6 weeks from submission to provision of a clearance certificate, according to the Chair (M Blockman – personal communication).

Comprehensive standard guidance on operating procedures is provided in a 280-page document of the UK National Research Ethics Service.8 This states that a decision should be given to an applicant within 10 working days but certainly within 60 days un-
less more information is required, when the 60-day limit is sus-
pended (this allows many interpretations!). An important regula-
tion is that a research ethics committee should consider about six
applications per meeting and certainly less than eight, something
not possible in South Africa because of the high number of ap-
lications.

In the Wits HREC (Medical) application form there are two state-
ments concerning timing:

‘4. Please note that written clearances will not be available until
approximately 10 - 14 working days after a Committee meeting – min-
utes must be checked, clearances printed and signed by the Com-
mittee Chair and only then despatched to applicants; this takes time.

‘6. Researchers from abroad should obtain ethics clearance
BEFORE arriving at Wits, a tight time schedule is not considered
a valid reason for departing from Wits Standard Operating Proce-
dure. A Wits collaborator may help obtain the clearance.’

Both these admonitions are usually ignored by applicants.

Forthcoming estimated workloads
Fig. 6 is the same as Fig. 5, but with the addition of an anticipat-
ed new application load to the WRO due to policy change of the
Health Professions Council of South Africa (effective from 2011)
that all clinicians wishing to register as specialists must have com-
pleted the equivalent of an MMed research project.

According to the Vice-Dean of the Wits Faculty of Health
Sciences, applications from a cohort of 250 trainee specialists
must be added for each of 2012, 2013 and 2014 after which
such applications should plateau – this recommendation is
based on the fact that specialisation is generally 4 years and on
the number of registered clinical postgraduates in the Faculty
(M Vorster – personal communication). By 2014 there will be
more than double the number of new applications there were
in 2011. Interestingly, it took 10 years, from 2002 to 2011, for
yearly applications to increase by 245 – something that is now
expected within 1 year.

For the WHCED, the number of new applications is likely to
remain steady at about 100 per year but, as shown by the regres-
sion line in Fig. 3, amendments are expected to increase.

The new HPCSA requirements will affect all HRECs at medical
schools in South Africa. The committees are in effect ‘service com-
mittees’ that must react to applications submitted in terms of South
African research ethics requirements, whatever that number might
be. The responsibility for providing staffing and facilities to enable
the committees to function belongs to the home institutions. It is
in the best interests of the institutions to do this because of the
returns, both in recognition and finance, of increased research out-
put and research grants awarded.

As a first stage in planning for the future a SWOT analysis was
done for the Wits HREC (Medical):

Strengths
• Longest-established HREC (Medical) in South Africa and in Af-
rica, and one of the 10 oldest in the world
• Experienced committee members across many disciplines and
institutions
• Preferred South African HREC by many international research
sponsors
• WHCED is an adequately staffed secretariat for clinical trials.

Weaknesses
• Inadequate staffing in WRO to cope with application numbers
• Committee members need to decide how to cope with the large
expected application numbers per meeting while complying with
South African law and regulations.

Opportunities
• The increase in research by clinical specialty trainees (reg-
istrars) should lead to an increased publication rate for the
University bringing in more government funding and aiding
the goal to be one of the world’s 100 best universities by
2022.
• Online applications and management of applications may speed
up turn-around time. iPads or notebooks will need to be pro-
vided.

Threats
The WRO as staffed at present will not cope with the large in-
crease in applications due to the new policy of the HPCSA for
specialist registration.
• The inability to cope with application numbers will affect dead-
lines for both undergraduate and postgraduate training.
• Delays in project approvals can adversely affect grant applica-
tions as a result of missing deadlines.

Fig. 6. Comparison of WRO and estimated WHCED new applica-
tions including the anticipated WRO application load due to new
HPCSA policy.
Conclusions

1. The HREC (Medical) is under severe and increasing strain due to new applications through the WRO which will increase from 2012 until 2014, by which time they will be double the current rate.

2. Bypassing applications is not possible due to legislation – the National Health Act, the South African Constitution and NHREC regulations.

3. Management of the new applications at meetings needs to be ‘brainstormed’ by the committee; based on the wide experience of members a solution is likely.

4. Without at least one extra full-time staff member in the WRO the management of the increasing application numbers will be impossible, with serious consequences for academic activities at Wits.

5. At the moment the status quo in the WHCED should be maintained but reassessed at yearly intervals.

Acknowledgements. Grateful thanks are extended to the HREC (Medical) secretariat staff members Anisa Keshav (WRO) and Jennifer Bryce-Borthwick for the application information as well as to the committee co-Chairs Ames Dhai, Charles Feldman, Merryll Vorster and Angela Woodiwiss for constructive comments on the manuscript.

References