

EXTERNAL REVIEW SUMMARY

The Centre has many strengths, chief among them are a small but very committed group of leaders including the Director and two Associate Directors. The education programs they have developed are very strong. The academic focus of the Centre's members has resulted in an impressive list of publications. Members of the Centre are helping to lead strategic and important education initiatives in the country. The Centre's reputation is enhanced by its Director being the Editor of a leading patient safety / quality journal. The strong support that the Centre receives from the Faculty of Medicine and, in particular, the Department of Medicine has clearly helped it to fulfill its mandate. The Centre enjoys excellent support from many of the academic teaching hospitals, in particular the two partnering hospitals, Sunnybrook Health Sciences Centre and the Hospital for Sick Children.

The reviewers did not have any substantial concerns with C-QuIPS based on the documentation that was provided and the interviews that were conducted. By design, the Centre has focused much of its time and energy on developing quality improvement / patient safety education courses and increasing its teaching capacity. This has been an effective strategy. There have been several important research grants obtained by members of the Centre; however, the Centre has not yet evolved to the point of developing interprofessional research themes or having enough administrative support to offer its members dedicated assistance in identifying grant opportunities or applying for research grants. The Centre will want to evaluate opportunities for developing programmatic research themes, to recruit faculty members, and to invest in research associates to support these themes.

The major risk to C-QuIPS is the relatively small number of faculty that currently exists to carry the extensive education load that the Centre has taken on and the limited number of researchers currently involved with the centre. A number of those interviewees external to the Centre commented that it was clear that the Centre was 'working on a shoestring'. The present model relies heavily on the commitment and dedication of a small number of staff with a very high workload; we do not regard this as sustainable in the next phase of the Centre's evolution. The latter issue could be addressed through recruitment; however, the Centre can also capitalize on the reputation that it has developed to promote and foster collaboration among existing faculty members who may be affiliated with other important Faculty Centres or Institutes. We believe that some of these issues can be addressed by the Centre leaders themselves, but wider discussion is needed within the university and healthcare providers. There is clearly the potential to create a major international centre which will be of benefit to both the citizens and patients of Toronto and to the wider international community working in this area. However, this will require more stable funding, a dedicated infrastructure and an increase in senior leadership and administrative capacity within the Centre. Both university and healthcare providers need to consider whether this is a direction they wish to pursue and support.

1. RELATIONSHIPS

The Centre is formally based in the Faculty of Medicine and has very strong support from senior Faculty who were unanimous in their praise for the achievements of the last five years, the personal energy and commitment of the Centre team and the leadership of Dr. Shojania. Chief Executives from associated hospitals were equally supportive and admiring of the progress that had been made by Centre's small team in providing training to large numbers of clinical staff. They recognized that the presence of the Centre available to all participating hospitals provides economies of scale and a level of expertise and high level training which would be difficult to provide within a single hospital. It is also clear that the Centre provides a focus for safety and quality improvement which, with its increasing international

recognition, has helped to give safety and quality improvement a higher focus in both the university and the participating hospitals. It is fair to say that all the senior leaders who attended the review spoke with evident pride of the achievements of the Centre.

As is the case in many international centres, hospitals have been the major focus of attention. This was surely a correct judgment in the early years of the Centre. In the next phase, with appropriate support, it will be possible to consider a wider reach in family medicine and community care. There are also a number of other groups within the Toronto area (such as simulation centres) which share some of the objectives of the Centre. In the coming years, there is the potential for the Centre to more actively reach out to other groups and perhaps act as the focus of a wider coordination of safety and quality activities in the Toronto health system.

2. RESEARCH

The Centre, by design, has not invested much time yet in developing a Centre-specific research agenda. Notwithstanding that, the individual members of the Centre have been very productive individually. The number of research publications by members of the Centre clearly place it ahead of other universities in Canada and comparable to high functioning centres whose focus is similar to C-QuIPS elsewhere across the world. During its next five-year mandate, the Centre has the opportunity to develop a greater focus on coordinating and facilitating patient safety / quality improvement research at the University of Toronto by developing defined research themes and programs. This will be enhanced by the development of a PhD (and a research-based Masters) program.

The development of a stronger research agenda is of course consistent with the vision of the Faculty of medicine. However it also has strong support from the healthcare providers who see it as a desirable and natural evolution from the Centre being a provider of the training to an organization that provides leadership, research, focused high value training and international links.

3. EDUCATION

By all accounts, the Centre has developed high quality and important educational programs that make the University of Toronto a clear leader nationally and clearly recognized internationally. It is clear that the Centre has exceeded its education mandate in the first five years of its existence. Future expansion plans are feasible now that its Master's degree program is able to train potential faculty members that can help share the teaching load over the next several years. The expanding number of graduates will also mean that local healthcare providers will increasingly be able to provide core training in safety and quality within their own organisations leaving the Centre to concentrate on training those who will themselves become leaders, trainers and researchers in the field.

As the Royal College incorporates patient safety and quality improvement competencies into its CanMeds framework, the Centre will play an important role in helping to define and coordinate the Faculty of Medicine's plan to meet the College's accreditation requirements for its post-graduate training program. Presumably, the Royal College's CanMeds initiative will also influence accreditation requirements for undergraduate medical training; the presence of the Centre will position the Faculty to effectively meet these requirements. Students who had attended the courses reported excellent educational experiences which gave them a much broader view of their clinical roles, expanding their vision from the care of individual patients to also embrace the wider improvement of the healthcare system. Furthermore, they had also received mentoring from the Centre staff both during and after the courses. All however commented that it was clear that the staff were 'extremely stretched'.

4. ORGANIZATIONAL AND FINANCIAL STRUCTURE

The Centre has a small number of faculty and support staff who currently use a small amount of space and can function within a simple organizational structure. Current financial support originates from the Faculty of Medicine and the two academic teaching hospitals. Additional revenue has come from some of the education courses that the Centre has created. However, the Centre does not receive revenue from the Master's degree program that it helped create in partnership with the IHPME. There have been some small donations received. Research grants that have been obtained by faculty members who are part of the Centre are used to support the individual projects but do not flow into the Centre and are not used to support the centre in any way. As the Centre grows and expands its educational and research agendas and takes on additional functions of coordinating, communicating and facilitating relationships between faculty members, current students and prospective students, it will require additional faculty members and administrative staff and therefore some more formal organizational structures plus additional revenue streams. Some possible places to look for additional revenue would include:

- a. academic health centres that benefit from the quality and patient safety education offered by the Centre
- b. Faculty partners (e.g. Nursing, Pharmacy)
- c. additional revenue from the courses offered by the Centre (including the current Master's degree program)
- d. philanthropy
- e. contracts / grants from the Ontario government, the Ontario Hospital Association, Canadian Patient Safety Institute
- f. research program grants

5. LONG RANG PLANNING CHALLENGES

C-QuIPS developed a clear and logical strategic plan as it started up. The plan is definitely consistent with the University's and Faculty's academic plan and has been followed with effective results. Going forward the leadership of this Centre recognize the need to renew its academic vision and develop a new five-year strategic plan that now will place more emphasis on creating a defined research agenda. Part of this renewed strategic plan will need to include updated thinking for garnering additional funding for the Centre to allow it to continue to meet its expanding education mandate and to develop a formal research agenda.

Although the Centre currently has space available within the academic hospitals that partner with the Faculty of Medicine to support it, additional space will be required that facilitates the development of additional, research-focused graduate programs (Masters and PhD) and a more dedicated research agenda.

Centre leaders and staff can, with partners, address some of the longer term challenges. However, a wider question also needs to be addressed by both university and by participating hospitals and other organisations. There is clearly the potential to create a major international centre which will be of benefit to both the citizens and patients of Toronto and to the wider international community working in this area. However, this will require more stable funding, a dedicated infrastructure and an increase in senior leadership and administrative capacity within the Centre. Both university and healthcare providers need to consider whether this is a direction they wish to pursue and support. Relatively small sums from a wider network of university and provider organisations could provide the more stable core funding for staff and infrastructure that the Centre needs to evolve to the next level.

6. INTERNATIONAL COMPARATORS

The Centre has developed effective education programs featuring a certificate program and a master's degree (in partnership with the Institute for Health Policy Management and Evaluation). Members of the Centre also participate in undergraduate and post-graduate teaching. The master's degree program in patient safety and quality improvement is one of only two available in Canada. Now in its second year, the program is admitting high quality candidates (the majority being physicians). The demand for the program is high and graduates who become members of the Centre will be able to increase the capacity for teaching. The education programs that the Centre is now able to offer clearly places the University of Toronto first among Faculties of Medicine in Canada as a leader in patient safety / quality improvement education.

In terms of research, the individual members of the Centre have a very good publication record and some already have an international reputation individually. However, the Centre has not as yet developed an overall research strategy (for understandable reasons) with a coherent set of research themes. Members of the Centre have participated in some important projects. However, the Centre does not yet seem to have evolved to the point of initiating or leading major programmes of research. This should not be seen as a criticism at this point in its evolution but should be an objective for the coming years.

7. CONCLUSION

Strengths

The Centre has many strengths, chief among them are a small but very committed group of leaders including the Director and two Associate Directors. The education programs they have developed are very strong. The academic focus of the Centre's members has resulted in an impressive list of publications. Members of the Centre are helping to lead strategic and important education initiatives in the country. The Centre's reputation is enhanced by its Director being the Editor of a leading patient safety / quality journal. The strong support that the Centre receives from the Faculty of Medicine and, in particular, the Department of Medicine has clearly helped it to fulfill its mandate. The Centre enjoys excellent support from many of the academic teaching hospitals, in particular the two partnering hospitals, Sunnybrook Health Sciences Centre and the Hospital for Sick Children.

Concerns

The reviewers did not have any substantial concerns with C-QuIPS based on the documentation that was provided and the interviews that were conducted. By design, the Centre has focused much of its time and energy on developing quality improvement / patient safety education courses and increasing its teaching capacity. This has been an effective strategy. There have been several important research grants obtained by members of the Centre; however, the Centre has not yet evolved to the point of developing interprofessional research themes or having enough administrative support to offer its members dedicated assistance in identifying grant opportunities or applying for research grants. The Centre will want to evaluate opportunities for developing programmatic research themes, to recruit faculty members, and to invest in research associates to support these themes.

The major risk to C-QuIPS is the relatively small number of faculty that currently exists to carry the extensive education load that the Centre has taken on and the limited number of researchers currently involved with the centre. A number of those interviewees external to the Centre commented that it was clear that the Centre was 'working on a shoestring'. The present model relies heavily on the commitment and dedication of a small number of staff with a very high workload; we do not regard this as sustainable in the next phase of the Centre's evolution. The latter issue could be addressed through recruitment;

however, the Centre can also capitalize on the reputation that it has developed to promote and foster collaboration among existing faculty members who may be affiliated with other important Faculty Centres or Institutes.

Recommendations

1. The Centre should evolve its mission by further developing its research mandate. There are several approaches that could be pursued – first and foremost, the Centre should work towards creating opportunities for coordinating a graduate training program for PhD and thesis-based Master degree candidates.
2. The Centre should evolve its organizational structure to support its ongoing educational mandate and support an enhanced research mandate (see Recommendation 1). The Centre requires a Director to lead education and a Director to lead research with an Executive Director to provide overall leadership.
3. The Centre would benefit if the Faculty of Medicine promoted the approach adopted by the Department of Medicine to create academic positions whose focus was quality improvement / patient safety among all of its academic departments – this could diversify the membership of the centre leading to improved intraprofessional collaboration.
4. The Centre should take steps to strengthen its relationships with healthcare faculties (e.g. Nursing, Pharmacy) by creating some formal leadership / membership positions for interested and qualified faculty members; opportunities to strengthen relationships with other University centres / institutes.
5. The Centre should explore with leaders of physician practice plans, their willingness to contribute some time of a key physician who is able and willing to play a key leadership role in the education / research mandate of the Centre.
6. The Centre could benefit from an enhanced profile and needs to enhance its coordination and communication with its members, students, potential students and stakeholders. To accomplish this, the Centre should consider employing a communications specialist.
7. The Centre should explore options to offer quality improvement and patient safety education to healthcare managers, executives and board members.
8. The Centre should explore options to include one or more patients in its activities.
9. The Centre's Executive Committee should consider creating a task force to investigate options for increasing revenue for the centre – some suggestions to consider include:
 - contributions from each academic health centre (rather than just two) since all academic health centres benefit from the quality and patient safety education offered by the Centre
 - contributions from some key Faculty partners (e.g. Nursing, Pharmacy)
 - increased revenue from the courses that are offered by the Centre (including the current Master's degree program)
 - donations from philanthropists
10. There is clearly the potential to create a major international centre which will be of benefit to both the citizens and patients of Toronto and to the wider international community working in this area. However, this will require more stable funding, a dedicated infrastructure and an increase in senior leadership and administrative capacity within the Centre. Both university and healthcare providers need to consider whether this is a direction they wish to pursue and support.

Reviewers

Charles Vincent PhD
Professor of Clinical Safety Research
Imperial College, London

W. Ward Flemons MD, FRCPC
Professor of Medicine
University of Calgary