



## Qatar Interprofessional Health Council: IPE for Qatar

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### ABSTRACT

Qatar has grown rapidly over the past 10 years particularly in the areas of healthcare needs and provisioning. The population has grown from 617,000 in 2000 to over 1.7 million in 2010. The number of hospitals both private and public has nearly doubled with the number of healthcare workers surpassing 11,000 in 2011. To help meet the demand for trained healthcare professionals there are now 4 educational institutions in Qatar addressing medicine, nursing, pharmacy, and allied healthcare (School of Health Sciences at the College of the North Atlantic – Qatar, College of Pharmacy at Qatar University, University of Calgary – Qatar, and Weill-Cornell Medical College in Qatar).

The World Health Organization (WHO) has identified a need to integrate all areas of healthcare and to foster team-based collaborative models to help improve healthcare service delivery. Interprofessional Education (IPE) provides a framework to facilitate such a model. A truly comprehensive and inclusive IPE program would include agreement on IPE competencies (shared competencies) amongst and between all healthcare educational providers (pre- and post-licensure) accompanied by collaborative models that promote and facilitate working together as teams. Measures of success include meeting the shared IPE competencies.

This paper describes the formation of the Qatar Interprofessional Health Council (QIHC) to help address healthcare needs in Qatar and their efforts to move IPE forward in the state and in the region. The QIHC consists of members from the 4 healthcare educational institutions in Qatar as well as members from Sidra Medical and Research Center and Hamad Medical Corporation (HMC). A discussion of barriers and solutions is included as well as the efforts of the member institutions to provide IPE support and integration into their programs. The QIHC has recently been awarded a National Priorities Research Program (NPRP) research grant to help provide a solid and contextually appropriate framework for IPE in Qatar.

*Keywords:* interprofessional education, healthcare, teamwork, collaboration

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## QATAR'S HEALTHCARE HISTORY

Qatar has developed rapidly, especially over the past 10 years. The population has increased from 617,000 in 2000 to over 1.7 million in 2010. Healthcare spending has increased 5-fold since 2001 [1]. The number of hospitals has grown from 5 in 2000 to 8 in 2010 with new hospitals scheduled to open in the next several years (see Table 1). The numbers of health care workers in Qatar has grown to over 11,000 in 2011 [1] including doctors, nurses, pharmacists and allied healthcare professionals. Hamad Medical Corporation (HMC) is the main provider for health care in Qatar and is the primary teaching hospital providing support for the clinical training of health professionals including medicine, nursing, allied healthcare, and pharmacy professionals.

To help meet long term healthcare needs Qatar has established an internationally-based system of healthcare education consisting of medicine, pharmacy, nursing, and allied health sciences. The number of healthcare educational institutions has grown from 1 in 2001 to 4 in 2008 (Table 2).

Healthcare is a primary component of Qatar's National Vision 2030 document which provides the framework for the future development of Qatar [2]. In follow-up documents including the National Development Plan 2011-2016 [3] and the Qatar National Health Strategy 2011-2016 [1] a world-class health care system is described as a key factor in Qatar's development. As stated in the Qatar National Health Strategy (QNHS) the focus of healthcare needs to shift from the traditional structure to a patient-centered model with global standards of professional scopes of practice. This shift will enable a "model of care ... integrated with different healthcare providers working cohesively to deliver an effective whole" [1]. The fourth goal of the QNHS is the "creation of a skilled national

**Table 1. Post-Licensure (hospitals).**

### Public Hospitals

Hamad Medical Corporation established in 1979 to manage:

- Hamad General Hospital opened in 1982
- Rumaillah Hospital refurbished in 1977,
- Women's Hospital opened in 1988,
- Al Amal Hospital
- Al Khor General Hospital
- Heart Hospital (opened May 2011)
- Primary Health Care Centers (20-30)
- Sidra Medical and Research Center (scheduled to open in 2012)
- Children's emergency centre

### Private Hospitals

Al Ahli Hospital opened in 2004 (private)  
 Al Emadi  
 American Hospital  
 Aspetar  
 Doha Clinic  
 Dukan Hospital

**Table 2. Healthcare Degree Conferring Institutions.**

Program	University	Description
School of Health Sciences	The College of the North Atlantic – Qatar	Established in 2002, the School of Health Sciences offers programs in a variety of health professions designed to meet international standards.
College of Pharmacy Department of Health Sciences (established 1980)	Qatar University	Established in 2006 with the first graduating class in 2011. The College of Pharmacy provides its graduates with the knowledge and skills necessary to become competent pharmacists, to meet the health care needs of this society.
Qatar Nursing program	University of Calgary – Qatar	Established in 2007 with the first graduating class in 2010. The nursing students in Qatar are educated to the same Canadian standards and receive the same credentials as students at the Calgary campus.
Pre-Medical Medical Programs	Weill Cornell Medical College	Established in 2002 with the first graduating class in 2008. After a two year Pre-Medical course, students move to a four year Medical program leading to the Cornell University M.D. degree.

healthcare workforce” and goes on to detail the professional education and skill mix essential for fostering a team-based collaborative model of service delivery [1].

### WHAT IS IPE AND WHY IS IT IMPORTANT TO HEALTH CARE IN QATAR?

The World Health Organization (WHO) in its 2010 report, “Framework for Action on Interprofessional Education (IPE) and Collaborative Practice”, strongly encourages efforts to develop and integrate IPE into providers’ healthcare programs [4]. This organization stresses a need for IPE and collaborative practice through the development of curricula with careful attention paid to the cultural nuances of the country and the region (see Fig. 1).

### DEFINING INTERPROFESSIONAL EDUCATION

The Canadian Interprofessional Health Collaborative Consortium defined IPE as,

“...interdisciplinary education [where] health care professionals learn collaboratively within and across their disciplines in order to gain the knowledge, skills and values required to work with other health care professionals” [5].

While other definitions of IPE exist [6–8]; a common theme across all is that IPE must include collaboration and teamwork involving all healthcare professionals.

Early proponents of IPE emphasized that through shared learning there is a requisite improvement in the knowledge, skills and attitudes amongst the multidisciplinary healthcare team. Recent refinements to the concept and practice of IPE, express the belief that this improvement can be sustained through a focus on shared competencies across the healthcare team/disciplines [8]. Certainly, this is echoed in the current understandings of IPE [5,7,8].

Barr outlines three dimensions of competencies that include common competencies, complementary competencies, and collaborative competencies. Common competencies are those that are shared between all health care professions; complementary competencies distinguish one profession from another; and collaborative competencies are the skills required by each professional group in order to collaborate within its own ranks as well as with other professions. This latter set of competencies is the focus of IPE. In order to be successful, however, these competencies need to be agreed upon and shared by all healthcare professions. Recent work by Tashiro et al (2011) has identified a taxonomy of competencies that can be used in the future to guide and evaluate the outcomes of IPE [9].

Shared interprofessional competencies aim to promote a patient centered, efficient, and effective working relationship amongst teams of healthcare professionals. Fig. 2 (a) and (b) suggest a before and after IPE intervention perspective that emphasizes that an outcome of collaboration and

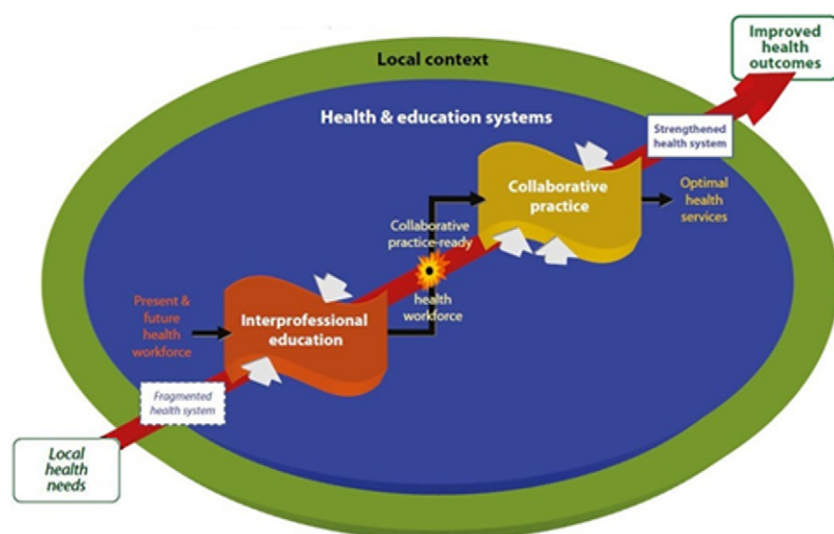


Figure. 1 Health and Education Systems (WHO, 2010) [4].

teamwork results in a much richer and robust healthcare experience for all stakeholders, of which the most important is the patient.

**DOES INTERPROFESSIONAL EDUCATION RESULT IN POSITIVE CHANGE?**

A meta-analysis of studies on the effectiveness of IPE by the U.S. Higher Education Academy [10] showed that of 53 studies meeting the criteria for inclusion, 41 (77%) reported positive outcomes. Measures of success included changes in perceptions and attitudes, knowledge and skills; behavior; organizational changes; and patient benefit. Of the 14 studies that reported patient benefit, 65% reported positive results and another 29% reported mixed results. Buring et al [11] found that patient-care was improved when healthcare professionals collaborated effectively and understood each other’s roles. Similarly, WHO in a review of IPE outcomes and studies, found IPE results in better collaborative practice which in turn “strengthens health systems and improves health outcomes” [4].

There are two primary areas where the implementation of IPE can be beneficial: (1) pre-licensure education and (2) post-licensure competency enhancement. The first is generally conducted while students are training in their profession at a post-secondary institution. The second is provided as ongoing professional development for working professionals (see Fig. 3).

An effective model for IPE integration is to begin at the pre-licensure level and continue through to post-licensure. Continued professional development at the post-licensure level will insure that IPE continues to be a priority and helps to integrate IPE into the practice of healthcare professionals who may not have had the benefit of pre-licensure IPE training.

**CHALLENGES FACED WHEN IMPLEMENTING INTERPROFESSIONAL EDUCATION**

The underlying belief for the support for interprofessional care is that working with members of other professions will result in the provision of more highly integrated, patient-centered care; in addition, the complexity of most health problems requires a coordinated approach to understanding and management [12]. Although advocates for IPE have tried to move forward in implementing this

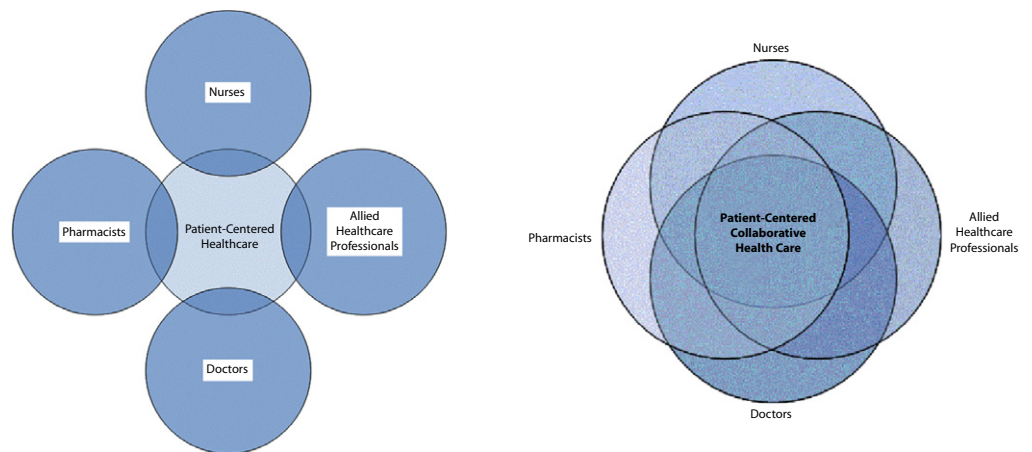


Figure. 2 (a) Patient-Centered Healthcare, (b) Patient-Centered Collaborative Healthcare.

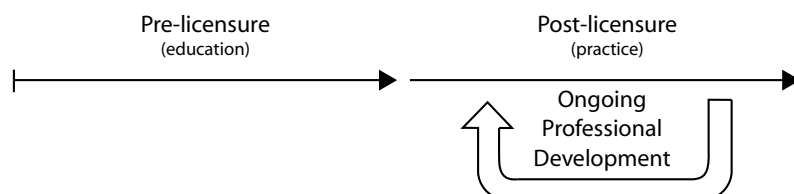


Figure. 3 Pre- and Post-licensure healthcare.

approach, one of the most difficult arenas in which to establish IPE has been in the undergraduate (or pre-licensure) health sciences.

Although there are issues that cause barriers to interprofessional learning at the pre-licensure level, such as basic differences in curriculum structures, lack of support and time, lack of comfort in teaching across disciplines, and financial constraints [13], the major difficulty appears to rest with a failure to establish a clear understanding of what competencies should be emphasized and measured in an undergraduate interprofessional curriculum [14,15]. It is also important that a team-based approach to collaborative practice is evident in the clinical settings [16] and adequate time is allocated to the development of interprofessional competencies.

In the State of Qatar, these barriers also exist, however this country is in an early stage of health care education development and implementation. Over the past 10 years, the country has become accustomed to a rapid rate of change and a thirst for improvement and innovation. Accordingly, the environment is ripe for the advancement of interprofessional education and collaborative practice. In recognition of the unique opportunity, the Qatar Interprofessional Health Council (QIHC) was formed in 2009.

### **QATAR INTERPROFESSIONAL HEALTH COUNCIL (QIHC)**

The Qatar Interprofessional Health Council (QIHC) initially came together in June 2009 under the leadership of the Dean of the School of Health Science at the College of North Atlantic-Qatar. Responding to a shared desire that many of her professional colleagues had for a regular and informal meeting to share and debate ideas and experiences in the design and delivery of effective programmes of learning for health science students, Dean Christine Bolan organized the first meeting and was chair for the first year. The Deans of each of the Health Science faculties in Qatar, plus their counterparts in industry (Executive Directors of Clinical Education, etc.) were invited to this initial meeting. Many rich and engaging conversations took place during these initial meetings.

The QIHC is currently comprised of individuals, from both academic and practice settings that are located in Qatar. All individuals are involved with different professional groups (allied health, pharmacy, nursing, and medical). All have a commitment to IPE and collaborative practice and each has an opportunity to influence their respective institutions. While the group is at the early phase of introducing IPE into pre-licensure in Qatar, initial barriers have been overcome and dealt with.

The current membership of the QIHC is:

- Christine Bolan – School of Health Sciences (College of the North Atlantic – Qatar)
- Carolyn Byrne – Nursing (University of Calgary – Qatar)
- Peter Jewesson – College of Pharmacy (Qatar University)
- Brad Johnson – Nursing (University of Calgary – Qatar)
- Suzanne Malt – Sidra Medical & Research Center
- Renee Pyburn – Sidra Medical & Research Center
- Mohamed El Tawil – Medicine (Hamad Medical Center)
- Mohamud Verjee – Medicine (Weill Cornell Medical College)

A cursory review of the minutes from these initial meetings quickly demonstrates a consistent theme of discussion: the sharing of ideas in the design and integration of inter professional learning within existing curricula. The importance of this issue was elevated by the efforts being undertaken at the time by the Deans from Qatar University – College of Pharmacy and the School of Health Sciences - College of the North Atlantic to receive international accreditation for a number of their curriculums. A core requirement of the accrediting agencies is demonstrated evidence of efforts being made to facilitate and or integrate opportunities for interprofessional learning within existing curricula [17]. IPE quickly became the primary focus of these meetings. Meeting time was dedicated to strategizing ways to raise the awareness of IPE within the Qatar healthcare community.

The following mission, vision, and purpose of the council are:

- **Vision:** To lead the education and development of health care professionals and healthcare systems which exemplify best practices in interprofessional care for the people and State of Qatar and the region.
- **Mission:** The QIHC will focus on embedding interprofessional collaboration in healthcare education and practice. Working with partners locally, regionally, and internationally, the QIHC will lead and foster collaborative interprofessional initiatives.
- **Purpose:** To provide a venue for communication and collaboration regarding interprofessional education and practice.

The council agreed on six strategic objectives to focus the council's activities:

1. *Knowledge Management*-To lead knowledge production, exchange, application and evaluation in the field of interprofessional education and practice.
2. *Capacity Development*-To identify opportunities to provide expert advice, support or resources to organizations or groups implementing interprofessional collaborative working or learning environments.
3. *Partnerships*-To develop and promote strategic partnerships with organizations to foster introduction and integration of interprofessional collaborative practices within their own operations.
4. *Role Modeling*-To foster world-class models of interprofessional collaboration within and among partnering QIHC organizations and sectors.
5. *Curricula*-To promote cooperative and coordinated approaches to curricula/program development and reform that ensure interprofessional education is a requirement in all health and human service education and continuing education programs, interprofessional competencies and accreditation standards.
6. *Research & Evaluation*-To work with policymakers, health providers, patients, and researchers to develop a research and evaluation agenda that asks key questions and evaluates the benefits of interprofessional education and collaborative practice on health systems.

As much work has already been done in defining IPE and in developing sets of core shared competencies, the QIHC has taken the path of vetting and adopting or adapting the most appropriate of these for Qatar's needs. To that end, in 2010 the QIHC adopted the WHO definition of IPE:

*"... the process by which a group of students (or workers) from the health-related occupations with different educational backgrounds learn together during certain periods of their education, with interaction as an important goal, to collaborate in providing promotive, preventive, curative, rehabilitative and other health-related services." [18].*

The QIHC is currently appraising a number of core shared competency frameworks for the suitability to the healthcare studentship of Qatar [19–21].

To help meet these strategic objectives, the QIHC has launched a pre-licensure awareness campaign consisting of panel discussions with the leaders from the partner educational institutions (Weill-Cornell Medical College in Qatar, College of Pharmacy – Qatar University, School of Health Sciences – College of the North Atlantic, and the University of Calgary – Qatar Nursing program). During 2011, "town hall meetings" involving a 4-member panel were held at each of the four educational institutions in 2011. These meetings were held to promote dialogue about the concepts, benefits and challenges associated with IPD, and to discuss implementation of IPE in Qatar. These sessions were attended by administration, faculty and students from the respective sites. Based upon the overall responses received, it is readily apparent that many in Qatar have embraced the concept of IPE and collaborative care, and wish to move in the direction of its advancement in this country.

In addition to the awareness initiatives, the QIHC has also pursued research funding to provide the resources and infrastructure to move IPE forward. In May 2011 the QIHC was awarded a US\$595,000

Qatar National Research Priorities Program (NPRP) research grant to help move our IPE program forward. The purpose of this project is to develop a set of IPE competencies that are shared and agreed to by healthcare professionals and healthcare educators. As the project moves forward we will develop faculty and student training materials consistent with the shared IPE competencies as well as scenario-based activities designed to provide opportunities to put student and faculty understanding of these competencies into practice.

Technology has played an important role in helping the QIHC to meet, communicate and archive information. Interprofessional collaboration has been supported by conferencing tools such as Skype allowing members to attend meetings from wherever in the world they are at the time. Similarly, discussion boards have helped create a repository to keep track of the council’s activities to date and progress towards meeting the strategic goals (e.g., archiving minutes, presentations, etc.).

Listed below is a summary of some of the primary challenges the QIHC has faced, and strategies for overcoming some of these challenges:

<b>Challenge</b>	<b>Solution</b>
Educating in silos	Create awareness among students and faculty of importance of IPE and effect on patient outcomes.
Getting management buy-in from each institution	Involve high level management (Deans, Sr. leadership) from each institution on council and identify champions
Integrating IPE into existing curriculum; scheduling student and faculty time to participate in IPE	Start small-build gradually and have a detailed year-by-year plan.
Sustaining interest in program	Regular monthly meeting of QIHC and scheduling of IPE activities regularly throughout the year.
Location of IPE activities	Rotating location among different schools for IPE presentations.
Costs	Application for Qatar National Research Fund (QNRF) grant.
Creating IPE learning opportunities (presentation, cases, scenarios)	Start with presentations at each institution with overview of IPE to create interest. Build on this with next step of creating learning activities including cases and scenarios.
Logistics of getting learners and faculty from different disciplines together	Schedule these interactions well in advance to allow faculty and students time to integrate into their schedules. Use technology to bring everyone together to provide a blending of face-to-face and virtual logistical support.
Communication among group	Create ability to virtually attend via “Skype” and create a web-based portal accessible to all group members where documents and communication can be shared. Meeting scheduling via Doodle.
Setting up goals and timelines	3-year strategic plan developed with goals and timelines.

**SIMULATION AND SCENARIO-BASED ACTIVITIES**

The School of Health Sciences at CNAQ has been very successful in implementing a Health Sciences Skills Competition yearly in which students from the various allied health science areas work together to participate in healthcare-related scenarios. Students and faculty from our pre-licensure partners (Pharmacy, Nursing, and Medicine) will join the competition in upcoming years thus providing a forum for practicing collaborative team skills with a wide range of health care professionals. This is an example of the activities the QIHC will continue to promote and support as part of our vision, mission

and strategies. Other examples include IPE awareness and teaching workshops for faculty and trainers some of which will be developed as a deliverable from our NPRP funded research project.

Weill Cornell Medical College in Qatar has a purpose-built Clinical Skills Centre. One of many training modules for medical students includes Objective Structured Clinical Examinations (OSCEs). Plans are being formulated to enable allied health professions to observe and even take part in suitable OSCE scenarios, enabling interprofessional cross pollination.

The College of Pharmacy at Qatar University has established two professional skills laboratories and the local medical clinic for the development of professional skills in a simulation training environment. In addition to other learning assessment, students in the 5-year degree program undergo five OSCE-like assessments over 3 years to help ensure minimum competencies have been achieved. The program also utilizes a “virtual hospital” (electronic health records for virtual patients) to facilitate a patient-centered approach to the training of BSc (Pharm) and PharmD students. The college wishes to expand the OSCE-like sessions to include other professions.

The University of Calgary – Qatar has developed a world-class simulation center and has begun to work with nursing faculty to integrate the appropriate use of simulation into the nursing curriculum. The simulation team has also begun to develop a simulation network with other healthcare institutions in Qatar with an eye to providing collaborative simulations.

## CONCLUSION

The QIHC has made a conscious decision to ‘walk the talk’ modeling good interprofessional practices in our institutions and inter-institutionally. The QIHC will continue to promote IPE awareness throughout Qatar and the GCC region through the inclusion of stakeholders and stakeholder organizations in our planning, meeting and dissemination strategies. A website to help provide a focal point for awareness and dissemination is planned for the near future. Articles such as this one will be actively encouraged as a way to highlight and promote IPE activities, innovation and awareness in the region. The connections and collaborations between healthcare professionals, faculty and students continues to grow and expand. The QIHC will continue to move forward its strategic plan within the state of Qatar and the Gulf Cooperation Council (GCC) region as well as internationally.

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