External Evaluation Report for International Christian University

Kyoto University Auditor Kiyoshi Higashijima December 6, 2016

Introduction

International Christian University (ICU) has been a pioneer in English language and liberal arts education in Japan after WWII. In the more than sixty years since foundation, numerous alumni have been playing an active role in the international community. In the post-war years, many Japanese universities were founded or reorganized with an emphasis on early specialization, students enrolling from the start in a particular department. This meant that students' study progressed simultaneously in the department as well as in college-wide programs. However, lack of an opportunity for students to build a solid foundation across disciplines became an issue. This led to the recent establishment of universities that advocate general and international education, although we need more time and data to verify how well this works.

As an external evaluator for ICU, my report will focus on the sixty-year history of ICU from the perspective of whether it provides a model for university reform in Japan, and also whether it should adopt examples from other institutions.

1. Education

A) Later Specialization and the Major System

Most Japanese universities admit students to the department of their major. At ICU, all applicants apply to the College of Liberal Arts: students choose their major after acquiring a broad foundation across disciplines in the first two years. The university provided data that shows approximately 70% of students change from their intended major. We do not have the same kind of data from other universities, but it may be difficult for most students to be certain of their academic direction before arriving at college. If that is the case, ICU can become a model for higher education in Japan. Indeed, Hokkaido University has adopted a general admission system in a move towards later specialization.

At ICU, applicants are screened without regard to whether they want to become arts or science majors. This means that those who graduated from arts streams in high school can go on to major in the sciences at ICU. However, the number choosing to major in the sciences remains small. At ICU, where dialogue is emphasized, it will be important for arts and science students to discuss topics from different perspectives. The IR Office and other related offices should analyze the situation to implement

measures to increase the number of science students.2

B) English Language Education and Study Abroad

In recent years, some Japanese universities have received attention for offering all their courses in English. However, it is still too early to evaluate the effect of the education at such institutions, as alumni who have graduated under this system are still young. The bilingual education at ICU not only offers instruction in language but also critical thinking skills that have distinguished ICU alumni active in the international community. The English for Liberal Arts Program (ELA) and other courses offered in English provide the opportunity to study abroad in accredited programs. A student I talked to had graduated from a high school abroad. He chose ICU for the courses offered in English and the Japanese Language Program (JLP). However, he was slightly worried that there would not be a wide enough choice of courses offered in English (18%). The university has set the goal to offer 40% of its courses in English by 2023. If realized, this would be an attractive feature for both Japanese and foreign students considering application to ICU.

Students and staff I interviewed on campus for this external evaluation switched seamlessly from Japanese to English when necessary, which left me with a strong impression of the truly bilingual environment at ICU. About 20% of students study abroad on exchange programs, but more than 62% attend the shorter summer programs, a rate higher than the target at most Japanese universities. The three-semester system at ICU with summer vacation in July and August makes it easier for students to attend summer school programs abroad. Excluding students whose mother tongue is English, the university can rightfully aspire to have all students take part in study and service learning programs overseas. I also hope that the increase in courses offered in English will motivate more students to write their senior thesis in English, building on a foundation in liberal arts education and instruction in areas of individual interest at exchange destinations, in a field not offered at ICU.

C) Admissions

ICU has an original screening system that focuses on whether students are suited for a liberal arts education, in lieu of the achievement entrance exam used by most Japanese universities. ICU's comprehensive test requires students to read several articles and use the information in them to solve problems, to demonstrate the ability to study proactively (ATLAS). The objective of the test is to find whether applicants are suited for the instruction in the humanities, social science, science, and language that

the university offers. This is an endeavor that aligns with MEXT's view of three essential factors in scholastic ability: knowledge and skills; ability to think, make judgments and express one's opinions; and, willingness to cooperate with others and proactive attitude in pursuing studies. The Ministry aspires to cultivate these qualities through elementary, secondary and higher education, by implementing measures such as smooth transition from secondary to higher education. Screening applicants by means of a simple written test may not be fair. To reduce dependence on entrance exams that leads to emphasis on rote learning in high schools, we need to implement multilateral and comprehensive reform in the admissions system at universities. ICU is a trailblazer in serving as a model for reform in university admissions.

D) Educational Achievement

Satisfaction for the education offered at ICU is very high. In the Alumni Survey, 94% of ICU alumni are satisfied with the education at their alma mater: 87.2% feel their critical thinking skills have improved; 85.5% feel their analytical and logical thinking has improved; 84.1% feel their communication ability has improved; and, 87.6% feel their awareness for other cultures and ethnicities has been enhanced. The university did not provide survey results for older generations, but interviews with current students revealed that some had ICU alumni grandparents, parents or high school teachers, who strongly recommended the college. This is evidence that graduates have strong faith in this institution with the urge to share the cherished experience with the younger generation.

E) GPA, Credit Limit per Term, Syllabus and Curriculum Tree

While other Japanese universities are beginning to adopt the GPA scheme, it has been part of the system at ICU, effectively used as criteria for scholarships and requirements for choosing a major and senior thesis advisor. Those with a high GPA can register for more credits than the limit per term. It should be noted that a failing grade for dropping out of a course is included in the GPA, which encourages students to be serious about attendance. The syllabus template includes the aim of the course, language of instruction, grading rubric, and assignments. The curriculum tree seemed to vary according to major, some listed methodically according to the recommended sequence of courses, others a simple list of courses offered. Just listing courses did not seem to convey to students what the faculty regarded as important in the field.

2. Support for Faculty and Students

A) The Advisor System and Academic Planning Center

Students must see their advisors on Registration Day, for advice on courses they will register for that term. Advisors can give consent to students' request to register for more credits than the limit per term, in accordance with the advisee's ability. While the major system has paved the way for students to think more thoroughly about their academic direction, many have a difficult time making a choice. Students can visit the Academic Planning Center after taking several courses to seek help from specialists and trained students (ICU Brothers and Sisters) in choosing a major that best fits their interests and aspirations. This system also supports students design their career path after graduation.

B) Website for Students (icuMAP)

Students and advisors can confirm on the portal site (icuMAP) where the student is in the ICU curriculum. This is an effective system for students in designing their course of study and for advisors to check grades and completed courses. It is noteworthy that students can see at a glance which courses they need to take to satisfy graduation requirements, a great help in efficient registration.³

C) Center for Teaching and Learning (CTL)

The CTL established in 2015 supports faculty teach through faculty development activities and students in their learning. Moodle provides videos of lectures students can watch as often as they like to confirm what they could not understand in class. This has helped students who have insufficient English revise lecture content as well as improve their language ability. CTL offers faculty support for uploading lecture DVDs using Moodle, which will be a great asset if it becomes the norm for courses at ICU. Unfortunately the number of faculty attending FD sessions organized by the CTL remains rather small. Strengthening governance or offering incentives might help to improve attendance.⁴

D) Learning Support for Students with Disabilities

I was deeply impressed with what I saw at the Office of Special Needs Support Services, where not just physically challenged students, but also those with development disorder gathered for support. I saw it as evidence of the advanced special needs support system at ICU, provided by specialized staff with students helping each other.

E) Student dormitories

Students from diverse countries live together in the ICU dormitories. Residents I talked to referred to the benefits of the experience gained through resolving problems arising from difference in cultural backgrounds, although sometimes they spent hours discussing solutions. It is natural for the university to be responsible for managing the dormitories, but I feel that respect for independent conflict resolution and event organization in each dorm are vital for students' experiential learning in the ICU community.

3. University Management

The President stated three clear visions for the university: to mature as it pursues its ideals; to bring each student's potential to fruition; and, to support each student to discover his/her calling. These are appropriate objectives for Japanese universities cultivating human resources in a less-populated Japan to continue to express its presence in the world.

A) Faculty Organization

In an age of radical change where new disciplines are born to meet the needs of the times, we need a flexible organization for a curriculum tailored to current demands. Many universities have thus opted to divide research from education. Faculty members are usually disciplined based. However, faculty from various departments conduct research and teach in new academic areas, especially for interdisciplinary subjects. ICU has a progressive organization, with faculty belonging to eight Departments, each of which has its own majors. Faculty from a single department teach a major in a traditional discipline, but multiple departments cooperate to design a curriculum and teach courses for interdisciplinary majors. This arrangement has increased the number of meetings, placing a heavier burden on faculty members who are in charge of more than one major. Usually the best faculty members are the most heavily burdened. It will be thus important to decrease the number of meetings, taking care not to place too heavy a burden on faculty, and provide incentives to ensure this. I have the impression that most universities have not been successful in controlling the burden on faculty or with ideas about how to devise incentives. If ICU can find a solution for this problem, it can be a model for other universities.

B) Appointment of Faculty and CLA Dean

Most established universities have a tradition of leaving faculty appointments to

departments and divisions, but this makes it difficult to cope with radical changes in society. At ICU, departments can request the President for a faculty position appropriate for the curriculum. The President distributes faculty members by considering changes in the status quo. This is a highly recommendable way of personnel management.

Most universities now have clearly-stated regulations about the authority of the President Selection Committee, but the Department Director is usually chosen by vote at the Faculty Meeting. At ICU, the Candidate Selection Committee for CLA Dean etc. shortlists candidates before taking a vote at the Faculty Meeting, and the President makes the appointment after taking the result of the vote in consideration. I see this as evidence of thorough governance compared to other universities.

Conclusion

ICU has pioneered international and liberal arts education in Japan, and has remained a model for other institutions that emphasize these two areas. I have raised some points where the university can improve. If they are realized, ICU will sustain its position as a model university for others in Japan. It should also be noted that the proportion of foreign national faculty and those acquiring degrees abroad far exceed that at other universities. Efforts to balance the budget by 2020 with strengthened work on acquiring external funds are ongoing. My deepest hope lies in the stable development of ICU as a model in liberal arts education in Japan.

¹ Applicants may be applying for ICU because they have not decided on a field they want to concentrate on in college.

² Science students in high school spend more time studying mathematics and science than on English, so they tend to be less enthusiastic about choosing a university that lays emphasis on English language education. Larger national universities may be absorbing the already small cohort of students who choose to study science in college. The root of the problem of the diminishing number of science students lies in secondary education in Japan, not just in the education ICU offers.

³ Some universities have a complicated system for which staffers are obliged to calculate required credits for each student individually. This has been a problem, especially for foreign students.

⁴ FD seminars are frequently held at other universities, but a common problem is attendance. One university has opted to issue certificates in FD attendance for 30, 60, 90, and 120 hours, to use as criteria for promotion or reward added to the year-end bonus.

Report on Outside Review for International Christian University (ICU) November 29, 2016

Linda Grove, Emerita Professor, Sophia University

ICU has established a well-deserved reputation as the most innovative small college in Japan, renowned for the quality of its liberal arts education. The University also has been one of the pioneers of international education in Japan, offering a bi-lingual curriculum since it's founding, and in 2014 received a "super global" university grant under the MEXT program that gives grants to universities which are the leaders in educational innovation designed to meet the needs of an increasingly globalized world.

Internally, ICU has been involved since 2008 in a major reorganization of its faculty structure and education curriculum. My comments will focus on these two areas. This report is based on the draft documents prepared by ICU, and on a visit and interviews with faculty members, staff and some students on November 17, 2016.

Brief Review of the Reform Process:

Ten years ago (2006) ICU had one Faculty (gakubu) and six divisions (gakka), with each division having a set quota for student enrollment. In 2008 the six divisions were abolished and all faculty and students became members of a single division of Arts and Sciences. Under the single division, the curriculum was reorganized into 32 majors (currently 31), and faculty members were organized into 16, primarily discipline-based "departments." In the years since then the "departments" have been slowly consolidated, and in 2015, faculty members were organized under 8 departments. These 8 departments are not departments in the conventional sense of that term: i.e. students do not "belong" to departments; the student quota (teiin) is for the Arts and Sciences faculty as a whole; and planning--for example decisions on faculty replacements--is done at the Faculty level. One of the major functions of the "departments" is to discuss and decide on curriculum and arrange class schedules. In discussions with administrators we learned that a faculty committee has submitted a report proposing further consolidation into perhaps five sections (area or schools), in an effort to provide greater coordination.

Comments: It is not difficult to imagine that the reform process has raised many questions. On the positive side, faculty members have been deeply involved in the consultation process, and serious discussions have given rise to new more flexible organizational forms. On the negative side, the burden of administrative participation on most faculty members is quite heavy, taking time away from teaching and research activities.

The process of reform at ICU has many similarities to the process of reform in the faculty I belonged to at Sophia University. In the liberal arts college model, students do not select a major until the second year of study. This model is designed to give the student time to learn more about the range of disciplines before committing to a particular field of study. This model works well in the United States, where universities determine their own size and can independently decide whether to increase or decrease student numbers in particular fields. It works less well in Japan where a university department's quota (teiin) has to be approved by MEXT, and where there are penalties for going over quota--as well as under. The solution to this at ICU (and Sophia) was to collapse the departments into one department with many sub-divisions. ICU currently has 31 majors, but this proved difficult to manage and over recent years they have been grouped together into "departments" which function to organize faculty and curriculum, but which do not have independent student quotas. Thus students still have the freedom of choice. On the administrative side, ICU is still searching for the optimal level of

administrative units that allow for effective coordination of faculty and curriculum.

Curriculum

Principles: The ICU curriculum is based on a classical liberal arts approach, in which students are introduced to major fields of learning (humanities, social sciences, natural sciences) in their first two years of study, and only choose a major field at the end of the second year. ICU adds to this classical liberal arts curriculum, a strong input of bi-lingual education. The university accepts students twice a year. In general, students entering in April are graduates of Japanese high schools, while those entering in September are graduates of foreign high schools or international schools in Japan. April students spend a significant proportion of their first year in the ELA (English for Liberal Arts) program. Students are divided into classes by language level, and the curriculum includes classes in critical thinking and academic writing. Language classes for students who enter in September focus on developing Japanese Language skills through classes in the JLP (Japanese Language Program).

During the first 2 years in addition to the language courses, students choose general education courses from the three major areas of Humanities, Social Sciences, and Natural Science, and also are able to choose elective courses. At the end of the second year, students then choose a major field (some choose double majors, or a major and a minor).

Comment: The ICU report notes that 70% of the students choose a major that was not the one they listed as their most likely major when they entered the university. This is a sign that the liberal arts curriculum is working as it should. Through the foundation course, students discover new fields of knowledge and make better choices, selecting areas of study that they find most interesting or best suited to their long-term life goals. In our conversations with a small group of students it was clear that the students had clearly thought through their career goals and made choices about majors that were related to their ultimate goals.

Organization of the Curriculum: Classes are divided into a carefully organized curriculum, with a numbering system that clearly indicates the level (foundation or introduction), intermediate, and advanced. Students are offered a choice of 31 majors: most of these are discipline based (sociology, history, chemistry, etc.) but there are also Interdisciplinary majors (ID) including fields like Development Studies, Gender and Sexuality Studies, and area studies ID majors in Japan Studies, American Studies and Asian Studies. Guidance is offered to second year students about choice of a major, and they can confer with the faculty advisor for each major, as well as with junior and senior students who have selected the major. An on-line system provides further information, and most of the majors have prepared "curriculum trees" which provide guidance on the ideal sequence of courses.

Comment: The academic planning system is very well thought out. The online portal allows both students and their advisors to see at a glance where they are in their course of study, and what needs to be taken next. Students are asked to write a short essay at the time of admission about what they want to study and their life goals, and then submit additional essays in successive years. These are available on the digital record, so the student and his/her advisor can see how ideas are changing and maturing. The academic planning office has special advisors who will consult with the students about choosing majors and course choice. The Center for Teaching and Learning (CTL) also has a room set up for individual and small group advising and discussion. The support system is well thought out and provides extensive support for all kinds of student queries. Staff members noted that the physical location of the CTL is not ideal, and are considering moving the center to the new main building when it is completed.

Majors, Double Majors, Minors: In the ICU liberal arts system students choose their major (or double major, major and minor) at the end of their second year, leaving two years of study to complete the degree. A major requires completion of 21 credits in the chosen field, leaving the

students with many electives or free credits. This system allows students many choices. Those who want to be generalists can complete a major and complement it with a wide range of electives; those with a particularly strong interest in a single discipline can take many more classes in that discipline; and those who have several interests can opt for two majors or a major and a minor. For students who are planning to go on to further study, this system allows the option of gaining a sufficient number of courses in a field to be qualified for graduate school, and for those who would like to pick up a credential—for example a teaching qualification—this also can be done.

Comment: For the student who has clear ideas about their interests and life plans, there is great freedom in this system to choose a combination of classes that fit with study and life goals. I wonder, however, how this works for students who are a little less sure of where they want to go. There would seem to be a danger of wandering without direction. Hopefully the academic planning system and close relationship with an advisor will help such students find their way through the system. In conversation with faculty members we also learned that the late decision on major does cause some problems for students who choose a major in the Natural Sciences. While it is probably technically possible for a student to choose a natural science major at the end of the second year and still graduate in four years, the nature of science curriculums normally requires a much more integrated and sequenced selection of courses beginning from the first and second years. Students who want to acquire a teaching qualification also need to begin to plan at an early stage in order to finish all of the requirements on time.

Bi-lingual Education: ICU has been a pioneer in bi-lingual education. The program begins with intensive work on language skills in the first year (English for students entering in April and Japanese for students entering in September). Most foundation courses are taught in both languages, and for more advanced courses classes follow one of four styles: (1) taught completely in English; (2) taught completely in Japanese; (3) J/E courses which are taught primarily in Japanese but reading or other parts of work in English; (4) E/J courses taught primarily in English but with reading or other work in Japanese. In many courses, including those in style 3 and 4, students have an option to write papers or exams in their stronger language. A new system was introduced in the 2016 academic year which eliminated the J/E and E/J designations, combining all classes under J or E or O (for courses taught in other languages). Class syllabuses now carefully note which activities take place in which language (for example, lectures, class discussions, reading assignments, ppt, assignments, papers and exams). This switch was made to clarify what had been somewhat unclear criteria. At the time the review materials were prepared, approx. 16% of the classes were taught in English, but the University has set a goal of increasing this to 40% by 2023.

Comment: Although the materials for review prepared by ICU make little mention of the methods for improving language skills and the quite innovative approaches to teaching, the efforts to design courses that give extra support to students who are taking classes taught in other than their native language can serve as a model for other universities. The transition from high school styles of learning to university styles is difficult for most students, and the difficulties are multiplied when students study in a language other than their native language. They are confronted with a whole range of problems, including understanding of written and spoken discourse, but also fundamental questions related to the "cultural knowledge" that grounds assumptions in a different culture and language, as well as differences in academic expectations about class participation and output in the form of papers and exams. ICU has developed a program that is intended to overcome many of these challenges. It seems to me that the intensive work on language skills in the first year is one of the keys to ICU's success. Presumably ICU freshmen enter with relatively good language skills (one would guess on average better than those at most Japanese universities), but are still some distance from being able to do college-level work completely in English. The intensive training--not just in language but in critical thinking and academic writing skills--lays the base for the next step, and the J/E

and E/J courses were an interesting innovation for helping students move to the next stage. Presumably the same is true for many of the September admission students, who can-- through the style 3 and style 4 courses--enjoy a Japanese college experience, with sufficient support and with the option to write exams and papers in English. The new system of labeling courses--adopted for the 2016 academic year--moves another step forward, but providing much greater information for students when they choose classes. As ICU moves forward to increase the number of courses taught in English, such information will be a great assistance for students in planning their course of studies. For students, presumably one of the main barriers to taking a course taught completely in a student's non-native language is the worry about final grades. The option to take a course taught primarily in English, with the possibility of doing papers or exams in Japanese, should help to remove student anxiety about grades. And for foreign students or those raised abroad, the same should be true for classes taught primarily in Japanese, but with an option to submit papers and exams in English. This approach of mixed language classes is an innovative way to bridge the transition into university study in a second language. ICU should be proud of its innovations in this field, and give them more emphasis in explanations of their programs.

Teaching methodology: Based on a reading of the review materials, our visit to the CTL and the discussions with both students and faculty it is clear that ICU teachers put a great deal of effort into teaching. Classes are usually small and most combine conventional lecture with more active learning experiences including class discussion and group work and presentations. Prof. Jeremiah Alberg, Director of CTL, introduced one of his current classes in which he has recorded and uploaded on the web short lectures (approx. 10 minutes each), which the students watch before class. Class time is given over to discussion. Student response has been very positive. The CTL holds regular faculty workshops on teaching methodology and has a support staff to help instructors master and use new technology. It is now possible, for example, to record short lectures in a teacher's own office and upload them to the website, making options like that used by Prof. Alberg very easy to use.

Comment: The experiments with combining on-line and conventional classroom sessions for a single course seem very promising. Studies show that the normal attention span of students is somewhere between 10-15 minutes, so the long lecture format is far from an ideal way to convey knowledge. The use of short, recorded lectures can convey important questions and concepts, and the exploration of the issues can be deepened in class discussion. As Prof. Alberg noted, the recording of short lectures allows students not only to see the lectures before class, but also allows them to refer back to the lectures for review. This presumably also is a major support for students who are taking a class in a language that is not their native language. Thus this method of combining short, recorded lectures with active in-class discussion has the potential to become a major contributor to the bi-lingual education model.

The CTL also plays a major role in faculty development programs. ICU is making major efforts through faculty workshops and other methods to encourage faculty to explore new teaching methods.

Additional comments with regard to the curriculum, organization system and research:

- (1) Statistics show a very unbalanced distribution of students across the 31 majors. The most popular major has 206 students, second place 87, and then dwindling down to majors with less than 20 students. Since students take many of their courses outside of their major field, it is not clear whether the distribution of students in classes is as off-balance as the distribution in majors might indicate. However, it would seem that some streamlining of the majors-perhaps combining several together--might make things easier to manage.
- (2) The unbalance also raises questions about the burden on teachers. ICU requires all of its students to submit graduation theses. The burden of thesis guidance in the most popular majors

must be quite heavy. Students are evidently given an opportunity to list three possible thesis advisors, but even with this system we can imagine that the most popular thesis advisors carry a heavy burden.

- (3) With so many majors, are there efforts to ensure that the amount of work required of students is roughly equivalent across the university? I noticed that when we looked at curriculum trees, some seemed to be very-well thought out, while others were not so clear, and several majors had not yet posted curriculum guidance on the academic planning website. The same is also true of senior thesis requirements: is there a common understanding across the majors about thesis standards and are these communicated to the students? If the university is going to continue to require all seniors to submit a graduation thesis, then getting a common consensus on standards would seem to be very important. Without it--and without some kind of common understanding of anticipated work loads, there is a clear danger that some students will choose a major on the basis of rumors about ease of completion.
- (4) Overall the current organization of the curriculum offers students a wide-range of choices, but would seem to raise major coordination problems for the faculty. First, the problems of coordinating the schedule to be certain that class schedules are set in such a way so that students in a wide-variety of majors (including the inter-disciplinary majors) can actually take the courses they need to take, in the right sequence. These coordination problems must be complicated by sabbatical schedules as well as on the student side by the necessity to coordinate period of overseas study with requirements when they return to ICU. Since many of the advanced courses are taught only once every two years, this undoubtedly complicates the scheduling problems.
- (5) One of the positive results of the new system of organization is a new approach to faculty hiring. The review materials note that approx. 30% of the faculty has been replaced in recent years as a result of retirement. Under the new organizational system, decisions on faculty hiring are made at the university level. In our rapidly changing global world, this means that rather than simply replacing retiring faculty with someone in the same field, the university can make better decisions on curriculum directions for the future and hire accordingly. It is not difficult to imagine that different groups in the university have very different ideas about future directions of development, and so we can assume that discussions on hiring are not easy. However as the university has moved to somewhat larger "departments" with less fragmentation of the faculty into small, discipline-based majors, inter-disciplinary discussions should eventually lead to greater consensus.
- (6) ICU, as a small liberal arts college, places a strong stress on the important work of teaching. However, in our contemporary world, research accomplishments are an important measure of a university's academic level and are used directly for university ranking. Moreover, in many of the MEXT programs, universities are required to report the number of successful applications for JSPS research grants as well as other grants. The review materials prepared by ICU show that there was a decline in success rates, with some improvement in the most recent years. This is obviously a very difficult question for liberal arts colleges. Scholars, particularly those in the humanities, are less likely to apply for such research grants, since the returns to the time spent in the application process are often quite small. Social scientists who need to do field work are more likely to apply, but certainly not at the rate of scholars in the natural sciences, engineering and medicine, where research grants are a fundamental necessity for research work. In discussions with Prof. Mizoguchi, Director of the Center for Research planning and Support, we learned about ICU's efforts to improve its record in gaining research grants. ICU also has a well-established sabbatical system. As for individual scholars, we can imagine that many of the younger new recruits are very concerned about research performance, both to ensure advancement to tenured positions, but also because of their commitment to research in their academic fields. For that reason, finding ways to streamline the administrative responsibilities

of faculty members (for example by reducing the amount of time spent in meetings through use of electronic notification, etc.) while maintaining sufficient involvement to ensure the continuation of the best parts of the ICU model should be at the top of reform efforts.