Cambridge Public Health Commission, d/b/a Cambridge Health Alliance
DoN #CHA-18090915-RE
Applicant Responses
October 5, 2018

1. **How much downtime is there on the existing CT scanner?**

   RESPONSE: Downtime can be broken down into two categories: servicing downtime and interventional radiology ("IR") downtime. Unfortunately, CHA does not have a tracking system to monitor the amount of time that the existing CT scanner has been down for planned and unexpected service issues. Anecdotal information indicates that the CT can be unavailable for periods ranging from several hours to, occasionally, over 24 hours.

   The existing CT scanner also comes offline approximately 4 – 8 hours per week while IR studies are conducted. As discussed more fully in Question 5 below, CHA expects the IR procedures needing CT guidance to increase.

   a. **What are the costs of downtime?**

      RESPONSE: CHA does not have data that captures a quantitative cost of downtime, but there are important qualitative and opportunity costs. Inpatients are waiting longer than hoped to have their CT. Outpatients need to be rescheduled creating an inconvenience and a cost for those patients. The most significant impact is with emergency department patients. CHA needs to go on stroke divert when there is no CT available. The emergency department has to hold patients (those it doesn't transfer) longer while waiting for the CT to come back on line. This creates a backlog affecting all ED patients.

   b. **Will CT downtime change after the addition of a second CT scanner?**

      RESPONSE: CHA forecasts that general CT downtime (i.e., time that no CT scanner is available) will significantly decrease with the addition of a second CT scanner. Each CT scanner will have scheduled downtime, and CHA will be able to plan its operations so that it always has one scanner available for urgent and emergent cases during planned maintenance. Having a second CT scanner will provide CHA the necessary flexibility to adjust schedules in the event one machine unexpectedly goes off-line to ensure on-site access for urgent and emergent patients and minimize the disruption of outpatient schedules.

      CHA also forecasts that outpatient cohort specific downtime will be significantly reduced. CHA will be able to schedule outpatients predictably with minimal risk of those patients being bumped by emergency or inpatient cases.

2. **Please provide the operating capacity of the existing CT scanner.**

RESPONSE: The existing CT scanner is staffed on a 24/7 basis. Capacity for outpatients is limited to 16-18 per day. Outpatients are scheduled during the day when there are two technicians on duty. The system is available to the emergency department and inpatient services on a 24/7 basis.

3. **What is the volume of CT scans for inpatients, ED patients, and outpatients?**

RESPONSE: Below is the volume of CT scans for inpatients, ED patients, and outpatients for the past five fiscal years (ended June 30):

Fiscal Year	Inpatient	Outpatient	Emergency	Total
FY14	926	1335	4158	6979
FY15	919	2093	4638	7650
FY16	712	2993	4533	8238
FY17	883	3108	5439	9430
FY18	741	3251	4932	8924

Please note that CHA identified a data error with the volume information submitted as part of its original Application, and the foregoing data supersedes that volume information.

4. **How many patients are transferred off-campus to CHA Everett and to non-CHA facilities to receive CT services?**

RESPONSE: CHA does not presently have the ability to track this within its systems. CHA will be implementing the EPIC Radiant module (radiology) on or about July 1, 2019 so that it will have the ability to track this information and the measures that it will be reporting on regarding the impact of adding a second CT scanner.

   a. **Are there any costs associated with transporting a patient off-campus for CT services?**

   RESPONSE: The costs associated with transferring a patient off-campus (to another CHA location) are the costs of an ambulance ride and the cost of a care provider to accompany the patient.

   The greatest cost is the disruption this causes for a patient and their family. It raises their anxiety level significantly, and they are leaving a unit that has cared for them and knows them.

b. Are interpreter services offered to all patients receiving CT services off-campus?

RESPONSE: CHA offers interpreter services to all patients who may need them at all stages of the care continuum and at all locations. Patients transferred off-campus (to another CHA location) receive interpreter services if they need them

c. Are CT records integrated into the CHA EMR system for patients transferred off-campus?

RESPONSE: The CT records for patients transferred off-campus (to another CHA location) incorporated into the CHA EMR system just as they would be at the Cambridge Hospital campus. If a patient is transferred outside of CHA, it is unlikely that the actual imaging will be integrated into the CHA EMR.

d. Will the addition of a second CT eliminate the need to transfer patients off-campus to receive CT services?

RESPONSE: One can never answer in absolutes, but one goal of the second CT is to ensure that CHA can always have one CT available for inpatients and ED patients when the other is down, thereby eliminating the need to transfer patients off-campus. In addition, CHA will be able to plan and schedule outpatient studies around anticipated downtime.

5. Do you anticipate any changes in utilization of CT services as a result of the addition of a CT scanner?

RESPONSE: In the immediate term CHA expects that CT volume may return to FY17 levels primarily as a result of being able to schedule and see outpatients more predictably and reliably.

In the longer term, CHA may be able to further grow its interventional radiology practice with the objective of keeping care local for CHA patients (access) and thereby reducing TME. In connection with its efforts to keep community level care at CHA (and reduce transfers to higher cost providers) IR procedures at CHA have been gradually increasing over the past 18 months, and CHA expects IR procedures needing CT guidance to continue increasing. To meet the needs of its patient panel, CHA is hiring interventional radiologists with the goal of being able to offer its patients more types of minimally invasive procedures.

Unlike the traditional justification for DoN-Required Equipment that looks to traditional market demand and predicted need for increased utilization, CHA's primary justification for the Proposed Project is to increase the quality of care provided to its patients and, as discussed in the Application, ensure that the vulnerable populations it serves have access to a full suite of imaging services that are integrated and coordinated with the rest of their

care. As CHA shifts away from fee-for-service to the value-based provider paradigm, it is not looking to increase its numerical volume of CT scans. CHA does need to ensure that it can provide its patients timely access to this service as patients need it, however. The Proposed Project will also provide CHA the opportunity to grow an IR practice in response to the needs of its patient panel.

6. **Please provide attendance information for the July 19, 2018 CHA PFAC meeting.**

   RESPONSE: Please see Attachment A.

7. **Describe any other methods of community engagement undertaken in addition to consultation with the CHA PFAC. Describe how these other methods meet the requirement to engage and consult with the community on the proposed project.**

   RESPONSE: HA supports the principles of community engagement and works to follow these principles as it develops its plans for meeting both clinical service needs and underlying public and population needs of the communities it serves. For this project, which CHA believes is a project to improve the quality of an existing service and not as an expansion of services, CHA only engaged with the CHA PFAC.

8. **Please provide the payer mix of the patient panel by payer source (Medicare, MassHealth, Commercial, etc.).**

   RESPONSE: Please see Attachment B.

9. **Please provide the racial make-up of the patient panel.**

   RESPONSE: Please see the accompanying Excel file which sets forth the self-identified ethnicity of the patient panel.

10. **Aside from the addition of a CT scanner, what other ways will this project reduce barriers to care?**

    RESPONSE: The immediate and direct focus of the Proposed Project is, on its face, a targeted one that addresses a specific identified need. More broadly, though, the Proposed Project is part of a wider effort at CHA to ensure that it can serve its communities as a comprehensive provider of culturally sensitive community level care. Enabling patients to receive care along the continuum of community level care from a single integrated healthcare provider while minimizing avoidable referrals to outside providers will reduce barriers to care for CHA's patients. If CHA can reduce the need for referrals to outside providers, it will reduce the barriers of time, expense and inconvenience that result from patients being referred to outside providers. Keeping more care within CHA will reduce uncertainty for many patients regarding their insurance status (and, consequently for many, their immigration status.) It will also ensure that our patients can benefit from the systems

that we have in place to provide culturally sensitive care. Through its Multicultural Affairs and Patient Services department, CHA has a well-developed infrastructure for addressing and removing linguistic and cultural barriers. Finally, but most importantly, the Proposed Project will help ensure that all CHA patients receive timely, high quality care and service without unnecessary and inconvenient delay.

Attachment A
Attendance Information for July 19, 2018 PFAC Meeting

Patients/ Family Members

Brian Perry
Cathy Haines,
Melissa Emery
Polly Marvin
Andrea Taylor
Barbara August
Kate Sokol

CHA Staff

Mary Cassesso
Sarah Primeau
Julia Saggese
Richard Balaban, MD
Eileen Welch
Adrianne Frankel
Paul Allen, MD
Cecilia Buckley

Patient/ Family Member Members Not Present

Sharon DeVos
Tim Fish
Alexandra Hollencamp
Shiksha Mukand
Carol Root

ATTACHMENT B

Payer Mix of Patient Panel by Payer Source

Insurance Group	Percentage
Blank	0%
CarePlus	6%
Commercial	21%
Commonwealth Care	0%
Medicare/ Medcaid PACE	0%
Health Safety Net	4%
HMO	10%
Industrial	1%
Medicaid	26%
MEDICAID MANAGED CARE	7%
Medicare	8%
MEDICARE MANAGED CARE	3%
QHP	7%
Research	0%
Self Pay	6%
Total	100%