STATE OF ILLINOIS

Trauma Center Feasibility Study

Illinois Department of Public Health

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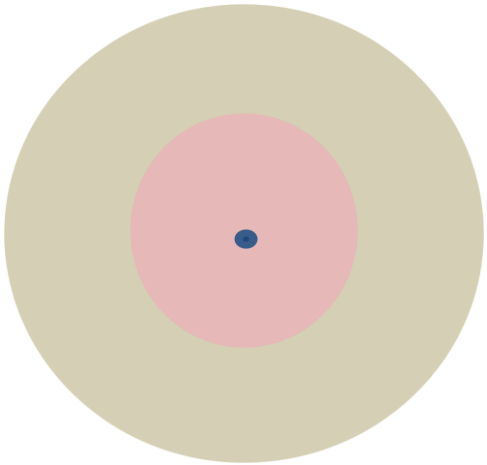
1/2/2015



Acknowledgments:
This report was conceived and developed with input from and in cooperation with subject matter experts at IDPH, including members from the EMS Division, Office of Preparedness and Response; State Trauma Advisory Council; Office of Policy Planning and Statistics; Government Affairs; Illinois Hospital Association; Department of Healthcare and Family Services; Governor's Office for Health Innovation and Transformation; and several members of the General Assembly.

Introduction:

There is no time when quality health care is more critical than in an emergency, especially in the event when someone has sustained a penetrating traumatic injury (e.g., gunshot wounds [GSW] or stab wound). Trauma centers—specialized facilities within hospitals with the expertise to care for these types of injured patients—have been shown to significantly decrease mortality.[1] Yet, we know that not all areas of the State have equal access to trauma centers. For example, rural areas in central and southern parts of Illinois are particularly underserved in this respect, mirroring national trends[2]. Moreover, there are relative "trauma deserts" in urban parts of the state, including some communities on the Southside of Chicago.

Geographic proximity to a trauma center is important in as much as proximity correlates with prehospital transport time. Simply put, the further away from a trauma center, the longer it may take to travel to a trauma center. Longer transport times often contribute to a higher mortality, while shorter transport times are associated with improved survival. A recent study examining the relationship of survival from a GSW and proximity to a trauma center in Chicago showed that for all victims shot more than 5 miles from a trauma center there was a 23% increased risk of dying[3]. For Blacks, which represented 68 percent of the victims in the study, further analysis showed the difference in mortality for those shot within 5 miles compared to those shot outside of 5 miles translated into roughly 6.3 excess deaths per year for the community studied.

Finally, it should be noted that although this study demonstrated that proximity to a trauma center (Adjusted Odds Ratio, 1.23) has a positive effect on survival outcomes for GSW victims, the authors found that other factors were even more predictive of mortality. These included injury severity (AOR = 8.06), lack of insurance (AOR = 2.27), and suicide intent (AOR = 8.76). So while addressing relative trauma deserts would seem to be an important strategy for reducing mortality due to penetrating injuries by decreasing prehospital transit time, access to mental health services and health insurance are also paramount based on the findings from this study.

Background: Illinois' Trauma System

Established in 1971 as the Nation's first statewide system, Illinois has a robust trauma system composed of 22 Level I and 45 Level II designated trauma centers, including 6 Level I trauma centers in Chicago. There are no Level II trauma centers in Chicago. See list, Attachment 1. All such facilities must have the requisite human and material resources (e.g., heliport) that include trauma surgeons, interventional radiology, a variety of surgical subspecialists (e.g., neurosurgeon, cardiothoracic, orthopedic), and immediate availability of an operating room. Level I and Level II designations are very similar with the primary

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[1] MacKenzie EJ, Rivara FP, Jrkovich GJ, et al. A national evaluation of the effect of trauma-center care on mortality. *N Eng J Med*. 2006;354(4):366-78.
[2] Brana CC, MacKenzie EJ, Williams JC, et al. Access to trauma centers in the United States. *JAMA*. 200;293(21):2626-33.
[3] Crandell M, Sharp D, Unger E, et al. Trauma deserts: distance from a trauma center, transport times, and mortality from gunshot wounds in Chicago. *Am J Pub Health*. 103(6):1103-9.

difference being the availability of subspecialists (in-house 24-hour vs. within 30 or 60 minutes) and the sophistication of diagnostic and monitoring equipment. While hospitals can receive trauma center verification by meeting specific criteria established by the American College of Surgeons (ACS), the only official designation as a trauma center is determined by individual state law provisions.

American College of Surgeons (ACS) Trauma Center Definitions

Level of Center	Summary Description	Access to Specialists	Specialists & Equipment
I	Highest level of surgical care; admits minimum required annual volume of severely injured; has research & surgical residency program.	24-hour in-house coverage; prompt availability of varying specialists.	Comprehensive range of specialists and equipment; heliport
II	Next highest level of surgical care; works in collaboration with Level I center.	Less 24-hour in-house; up to 60 minute response time for other specialists.	Full range of specialists; heliport
III	Lowest level center; limited care; has transfer agreements with Level I or Level II centers.	Limited	Limited

The Illinois Department of Health (IDPH) was given the authority to designate and regulate all trauma centers through the *Illinois Emergency Medical Services Act* of 1980 (210 ILCS 50). Subsequently, through the *Illinois Trauma Center Code* (210 ILCS 50/3.90) the Department was given further authority by permitting any hospital that met the Department's trauma center standards to be so designated.

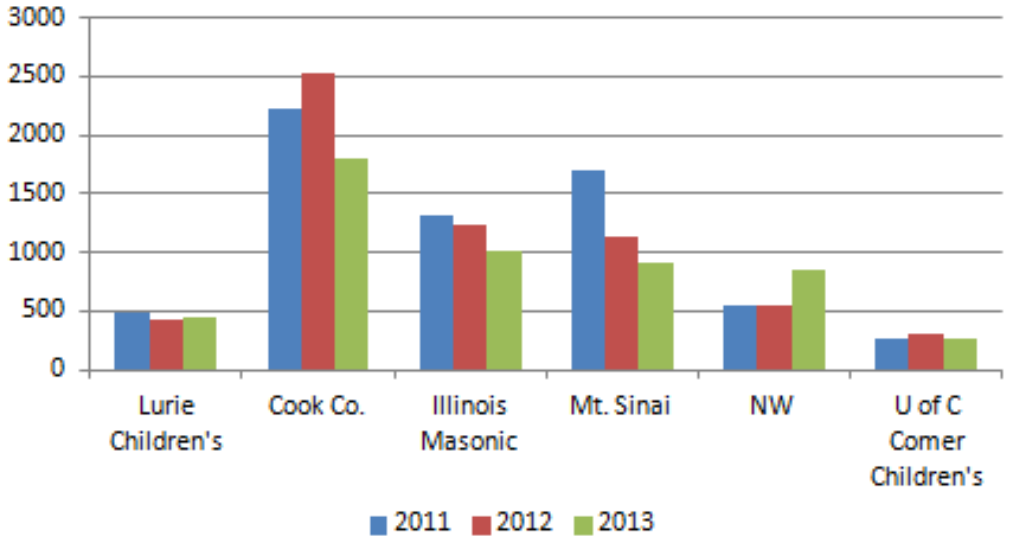
In 1993, legislation was passed establishing a *Trauma Center Fund* (30 ILCS 105/5.350) populated by revenue collected from traffic violations. The amount of funding that each hospital receives is based on the regional share of the fund and a formula that includes patient volume, length of stay, and required care provided. Since its inception, the Department has distributed more than $28 million to trauma centers. IDPH distributed approximately $4.9 million for FY2013. It should be noted that in addition to this modest monetary incentive, hospitals receive an estimated $40 million from Medicaid based on their reimbursement model. These financial resources are useful to help offset some of the expenses incurred caring for significantly injured patients. It is estimated that the average annual cost to support Level I or Level II trauma centers can exceed $20 million[4]. The cost

[4] Rotondo MF, Bard MR, Sagraves SG, et al. What price commitment: what benefit? The cost of a saved life in a developing level I trauma center. *J Trauma*. 2009 Nov,67(5):915-23.

of trauma center readiness (e.g., on call coverage) regardless of the patient volume or insurance status not captured by traditional billing, is $2 – 3 million annually[5].

Currently, Chicago has six trauma certified Level I hospitals: Lurie Children's, Cook County, Illinois Masonic, Mt. Sinai, Northwestern Memorial, and University of Chicago Comer Children's. Each hospital treats roughly between 250 to 2,500 trauma patients per year, with Cook County Hospital, Illinois Masonic, and Mt. Sinai hospitals treating the majority of such patients (Figure 1). Despite this network of trauma centers in the city, which some have argued are adequate in number—the ACS generally recommends having one or two high-level trauma centers for every 1 million people[6]—, due in part to their distribution there remains relative trauma deserts in the Southside community.

Figure 1. Trauma Patient Distribution by Hospital, Chicago, IL, 2011 - 2013



Regardless of whether or not there is an absolute capacity or a distribution problem, it is important to note that trauma center participation is strictly voluntary. Each hospital must make a business case for pursuing trauma center designation. Given the substantial expense, it is likely that there may be hospitals that wish to achieve a trauma designation, but cannot. Certainly, it is less likely that a financially distressed facility will be able to meet the state's requirements. As a result there are several relative trauma deserts across the state. See map, Attachment 2. For example, there are 50 counties south of central Illinois where residents must travel at least one hour to access a trauma center. So while IDPH certifies all trauma centers in Illinois, including those in Chicago, the Department has no legislative, fiscal, or operational authority to require a hospital to become a trauma center.

[5] Taheri PA, Butz DA, Lottenberg L, et al. The cost of trauma center readiness. *Am J Surg*. 2004 Jan;187(1):7-13.
[6] Galewitz P. Boom in trauma centers can help save lives, but at what price? Kaiser Health News. http://kaiserhealthnews.org/stories/2012/september/25/trauma-centers.aspx

Overview: Why a Feasibility Study?

Given the high rates of firearm-related homicide in Chicago's Southside, and the relatively higher likelihood that a resident will sustain a penetrating life-threatening wound requiring the use of a trauma center, a subject matter hearing to explore the impact of relative trauma deserts on this and other communities was held on November 20, 2013. This hearing was convened by State Senator Mattie Hunter, who represents the 3rd Legislative District which includes the Southside Chicago community. During the hearing testimony was heard from community advocates, students, faith-based organizations, healthcare consumers, healthcare providers, and several State agencies, including IDPH. See Attachment 3. A follow-up meeting was held on January 30, 2014 to discuss the how best to address the apparent trauma desert on the Southside of Chicago and those that exist across the State. It was agreed that IDPH would develop and conduct a survey to explore the feasibility for expanding the current trauma system and improve access to trauma centers for all residents.

The Illinois Department of Public Health developed a basic survey based on the current Illinois Trauma Center rules[7]. The intent of the survey, conducted during June 2014, was to assess the level of services currently in place at respective hospitals and determine what, if any, additional services, staff, and equipment a hospital would need to acquire in order to achieve a Level I or Level II trauma center designation.

In addition to assessing capacity, the survey asked each responding facility about their interest in pursuing a trauma level designation. The assumption was that hospitals with high feasibility scores (based on facility attributes and readiness) and high interest levels would be more likely candidates for achieving trauma designation compared to hospitals with a low feasibility scores and expressing low interest. Obviously, cost, geographic location, and competition for trauma patients are important factors for any hospital considering trauma designation. However, the goal of the survey was to serve as a preliminary assessment prior to more in-depth discussions and hospital led internal assessments.

Hospital Selection:

The needs for trauma services across Illinois are diverse. For example, Southside and Westside Chicago communities tend to have higher numbers of firearm-related violence necessitating trauma services to treat penetrating injuries such as GSW and stab wounds. Rural communities, on the other hand, tend to have more injuries resulting from blunt mechanism, such as those related to motor vehicle crashes or falls. Although urgent surgical care is much more frequently required for penetrating trauma than blunt trauma, in all such cases, getting the most critically injured patients the right care, at the right place, and at the right time will help save lives. For this reason the survey was expanded to include central and southern regions of the State.

[7] http://www.ilga.gov/commission/jcar/admincode/077/07700515sections.html

The Southside of Chicago was the initial focus of this survey; however, the survey was expanded to include central and southern hospitals given the relative trauma deserts in other parts of Illinois. In the area of Chicago patients located in relative trauma deserts are transported 10 minutes or longer to the nearest trauma center. In central and southern Illinois, many victims of traumatic injuries may be stabilized at a local hospital, but then must travel as far as two hours away to receive trauma services and in some cases across state borders (e.g., Indiana, Iowa, and Missouri). Hospitals were identified based upon proximity to relative trauma deserts and/or their previous participation in the Illinois Trauma System. Nine Southside Chicago hospitals were selected for inclusion in the study: Advocate Trinity, Jackson Park, Roseland, South Shore, St. Bernard, Mercy, Holy Cross, Provident, and the University of Chicago Medical Center. In additional, twelve hospitals were targeted in the central and southern region of the state to take part in the study.

Methodology:

The survey questions were developed to correspond with the IDPH trauma rules. The self-administered survey was distributed electronically using Survey Monkey between May and July, 2014. Several follow-up communications (via email, direct communication) were sent to hospitals that did not complete the survey. While the survey went to hospital administrators and the Emergency Department managers, we can only assume that the individual that completed the on-line survey held the authority within the hospital to accurately respond to each question, and consulted senior members of the hospital where appropriate. The survey (Attachment 4) assessed the following areas:

- Hospital services available
- Maximum Intensive Care Unit (ICU) capacity
- Percentage of certified/eligible physicians
- Emergency Department bed capacity
- Interest for Level I or II trauma designation
- Interest for Level III (proposed) trauma designation

The survey used a quantitative scale (e.g., available services, percentage of certified physicians) together with qualitative measures (e.g., interest level) to get a more global picture of a hospital's overall readiness and desire to pursue a trauma center designation. Although availability of services questions for Level I and Level II had different scales (0 – 85 and 0 – 70, respectively), both categories were weighted to a scale (percentage) of 100 for ease of comparisons. By weighting the scores it was possible to compare a facility that lacks ancillary services (e.g., physical therapy, social services, lab or x-ray), but meets or exceeds the subspecialty physician services, with another facility that has the required ancillary services, but is deficient in most or all subspecialty physician services (e.g., orthopedics, neurosurgeon, urologist). In most instances it is less expensive to recruit and implement the ancillary services than it may be to recruit and pay for subspecialty physician services.

A feasibility threshold was arbitrarily set at the 60 percent level based on the rationale that if a hospital has 60 percent of the required resources to meet a Level I or II trauma designation, it is reasonable for the facility to achieve this designation with additional investments during a relatively short time period. Conversely, those hospitals with a capacity score below the 60 percent threshold would require significant economic investments over a sustained period of time to reach certification eligibility.

In addition to survey responses, a cursory review of Hospital Compare data published by the Centers for Medicare and Medicaid Services (CMS)[8] was conducted for select Chicago area hospitals. Albeit a proxy measure of hospital performance and quality of care, these measures represent wide agreement from CMS, the hospital industry and public sector stakeholders such as The Joint Commission and the National Quality Forum. For this analysis, the focus was on measures of timely and effective care, including heart attack care, surgical care, and emergency department care.

Results:

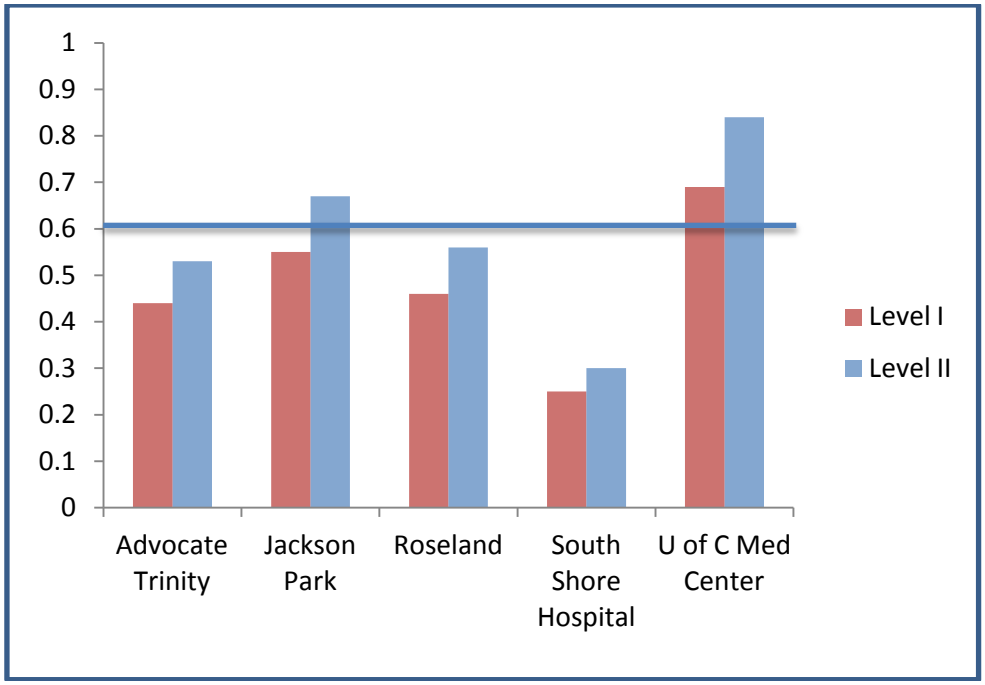
Northern Region (Southside Chicago):
Despite multiple attempts encouraging participation, only five of the nine Chicago hospitals selected for inclusion in the study completed the survey. This corresponds to a response rate of 56 percent (5/9). The survey results below show the actual and weighted feasibility scores for each hospital based on the services that are available at each institution.

	Level 1		Level 2	
Name of Facility	Feasibility Score	Feasability Percentage	Feasibility Score	Feasability Percentage
Advocate Trinity	37/85	0.44	37/70	0.53
Jackson Park	47/85	0.55	47/70	0.67
Roseland	39/85	0.46	39/70	0.56
South Shore Hospital	21/85	0.25	21/70	0.30
University of Chicago Med Center	59/85	0.69	59/70	0.84
Mercy Hosp/Med Center	NA	NA	NA	NA
St. Bernard	NA	NA	NA	NA
Provident	NA	NA	NA	NA
Holy Cross	NA	NA	NA	NA

[8] http://www.medicare.gov/hospitalcompare/results.html#dist=25&loc=CHICAGO%2C%20IL&lat=41.8781136&lng=-87.6297982

Of the five hospitals that responded, two facilities, South Shore Hospital (the lowest scoring facility) and the University of Chicago Medical Center (the highest scoring facility), which currently has a level 1 pediatric trauma designation, indicated no interest (e.g., zero score) in obtaining an adult trauma system designation. Out of the remaining three hospitals that responded there was moderate to high interest in becoming a trauma center, ranging from 7 to 8 on a 0 – 10 point scale. However, neither Advocate Trinity, Jackson Park, or Roseland hospitals reached the feasibility threshold for a Level I trauma center, and only Jackson Park (score .67) reached the threshold for a Level II trauma center according to survey (Figure 2). The common identified barrier to seeking trauma center designation described by survey respondents was the lack of subspecialty physician services.

Figure 2. Trauma Center Feasibility Scores for Southside Chicago Hospitals



Central and Southern Regions:

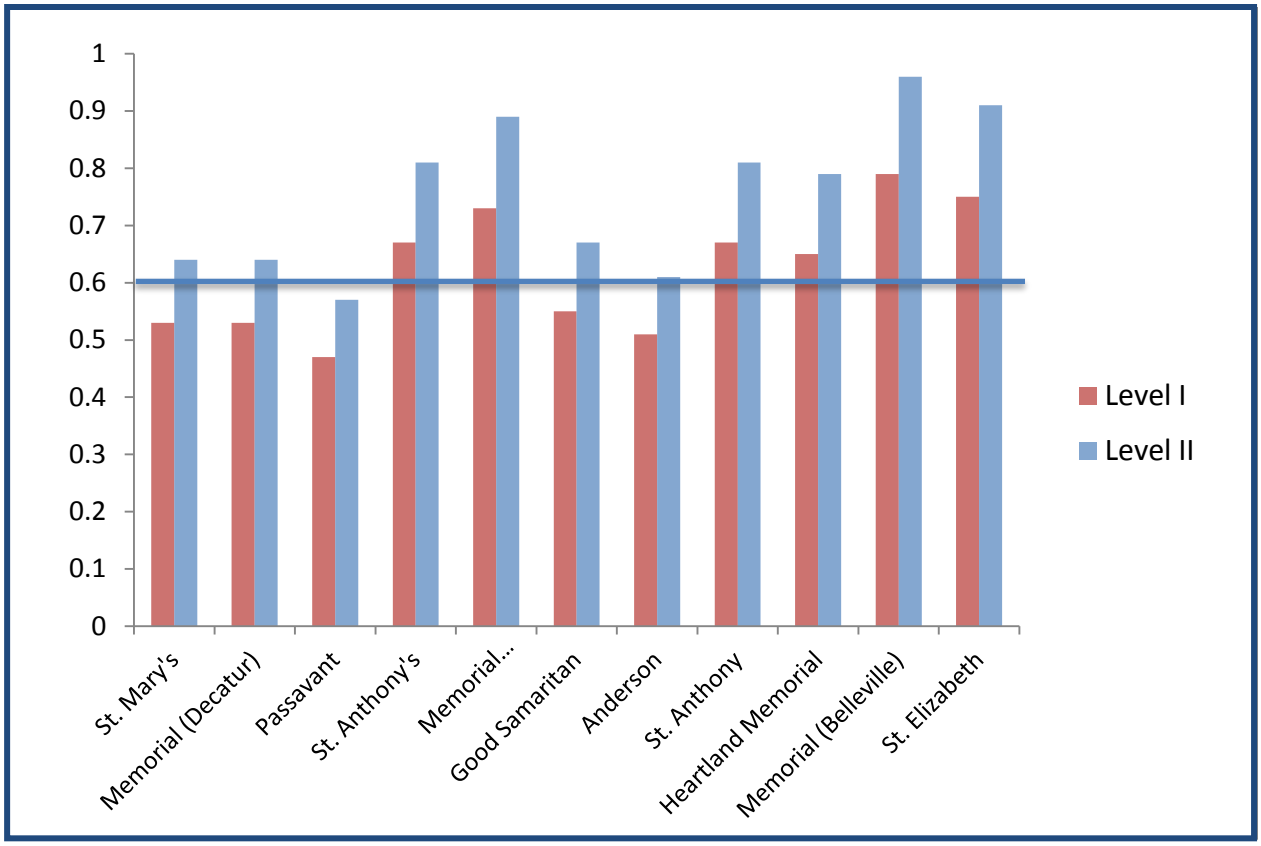
The response rate was 92 percent (11/12) for hospitals in the central and southern regions selected for participation in the study. Only Sara Bush Lincoln Hospital (Mattoon) failed to respond. Most of Illinois south of Interstate 72 is without an in-state trauma center requiring that patients suffering from traumatic injuries travel either to Indiana, Iowa, or Missouri. The table below summarizes feasibility survey results that show the actual and weighted scores for each hospital based on their available services. By and large, hospitals surveyed had higher feasibility scores for Level I trauma designation than those urban hospitals surveyed, ranging from .47 to .79. Six hospitals (St. Anthony's, Effingham [.67], Memorial, Carbondale [.73], St. Anthony's, Alton [.67], Heartland Memorial [.65], Memorial,

Belleville [.79], St. Elizabeth's [.75]) exceeded the feasibility threshold for a Level I trauma center .

With respect to Level II trauma designation, the hospitals surveyed had moderate to high scores (.57 to .96), with all hospitals with the exception of Passavant in Jacksonville (.57) exceeding the feasibility threshold, suggesting that they could meet the requirements with relatively little additional investment. See Figure 3.

	Level 1		Level 2	
Name of Facility	Feasibility Score	Feasability Percentage	Feasibility Score	Feasability Percentage
St. Mary's (Decatur)	45/85	0.53	45/70	0.64
Memorial (Decatur)	45/85	0.53	45/70	0.64
Passavant (Jacksonville)	40/85	0.47	40/70	0.57
St. Anthony's (Effingham)	57/85	0.67	57/70	0.81
Sara Bush Lincoln (Mattoon)	NA	NA	NA	NA
Memorial (Carbondale)	62/85	0.73	62/70	0.89
Good Samaritan (Mt. Vernon)	47/85	0.55	47/70	0.67
Anderson (Maryville)	43/85	0.51	43/70	0.61
St. Anthony's (Alton)	57/85	0.67	57/70	0.81
Heartland Memorial (Marion)	55/85	0.65	55/70	0.79
Memorial Hospital (Belleville)	67/85	0.79	67/70	0.96
St. Elizabeth's (Belleville)	64/85	0.75	64/70	0.91

Figure 3. Trauma Center Feasibility Scores for Central and Southern Illinois Hospitals



Many of these hospitals previously held a Level II trauma designation, but did not maintain their designation for various reasons, most often citing difficulty recruiting and retaining certified physicians and surgeons. Finally, most hospitals in central and southern Illinois have indicated they are interested in participating in the Illinois Trauma System contingent on the expansion of the system to include an additional tier (e.g., Level III) trauma hospital designation as proposed last legislative session in SB 3531. Given that trauma deserts are arguably more prevalent in these regions these responses are not unexpected.

Discussion and Recommendations:

Despite having one of the oldest statewide trauma systems in the country, Illinois still has several relative trauma deserts across the state. In urban settings such a Chicago's Southside, it has been argued that proximity to a trauma center in excess of 5 miles constitutes a trauma desert[9]. Yet, we know that there are significantly more trauma deserts in rural areas across the State, often 50 miles or more. See maps, Attachments 5 and 6. Because proximity is correlated with prehospital transit time, and transit time is strongly correlated with survival, especially for penetrating trauma injuries, the Illinois Department of Public Health recognizes the need to further expand and improve the availability of trauma care to the patients throughout Illinois.

[9] Crandell M, Sharp D, Unger E, et al. Trauma deserts: distance from a trauma center, transport times, and mortality from gunshot wounds in Chicago. *Am J Pub Health*. 103(6):1103-9.

The purpose of this preliminary analysis was not to determine if an additional trauma center is merited in the Southside of Chicago (or downstate), or to recommend which hospital(s) should pursue a trauma level designation. The purpose of this study was to glean a better understanding of the most likely candidate hospitals to target for additional engagement relative to expanding the statewide trauma system. Simply put, the study aimed to answer the following question: B*ased on facility attributes, capacity, interest and geographic considerations, which hospital(s) deserve further consideration for expanding the statewide trauma system?*

Notwithstanding the poor response rate for potential candidate hospitals in the Southside Chicago area, three hospitals would appear to be feasible candidates for a Level II trauma designation given their current attributes. Jackson Park (score .67 out of 1.0) reported the highest feasibility score, followed by Roseland (.56 out of 1.0), and Advocate Trinity (.53 out of 1.0). Of these three facilities, Jackson Park tended to have higher reported performance as measured by CMS Hospital Compare regarding timely and effective care compared to Advocate Trinity and Roseland Community. There were no hospitals among those surveyed in Chicago that have sufficient resources to meet the Level I designation with the exception of the University of Chicago Medical Center which expressed no interest in an adult Level I or Level II trauma center.

Among hospitals surveyed in the central and southern areas of the State, it would appear nearly all could obtain a Level II trauma designation with relatively few additional resources. In addition, based on their current capacity, six of the 11 surveyed could reasonably obtain a Level I designation (scores ranging from .65 - .79 out of 1.0), although recruiting subspecialty staff appears to be a stubborn challenge. Healthcare workforce development is a key issue and priority for the State and continues to be addressed through a number of efforts led by IDPH, the Department of Employment Security, and the Governor's Office for Health Innovation and Transformation. Given a statewide shortage of primary care providers, we would expect the shortage of subspecialists required for trauma center designation to be even more pronounced.

Based on this preliminary assessment, and taking into account any reporting bias by the respondent (e.g., overreaching or underreporting), the limited participation from Chicago hospitals, and the relatively narrow scope of information obtained from the voluntary hospital survey, the Department offers the following six (6) recommendations:

1. To address the relative trauma desert in Southside Chicago, community leaders and advocates are encouraged to engage Jackson Park, Roseland, and Advocate Trinity to either conduct an internal assessment or utilize a healthcare consulting service to assess the hospitals feasibility to become a Level II trauma center. A comprehensive assessment would need to be implemented in order to determine the feasibility of one of the responding hospitals to become a trauma center. This would need to include among other factors a hospital's quality measures, fiscal health; physician staff, subspecialty physician services, and specialty care units in place as well as required to care for trauma patients. A consultant should be able to project

anticipated costs associated with meeting the requirements to develop a trauma program at a hospital. With the exception of the University of Chicago, none of the hospitals surveyed would reasonably be able to reach a Level I trauma designation without a considerable amount of investment. But as noted, Level II trauma centers approximate the specialization of a Level I trauma center with few exceptions and therefore would appear to be a reasonable option.

2. To address the relative trauma desert in Southside Chicago, community leaders and advocates are encouraged to engage other hospitals, including those that did not respond to our voluntary survey (e.g., St. Bernard, Mercy, Holy Cross, and Provident) to assess their desire, capacity, and readiness to participate in the statewide trauma system. It may be that the four hospitals that chose not to respond to the survey may have no interest in pursuing a trauma designation; however, this cannot be assumed. It may be that these facilities have concerns about competitive advantage, perception, and pressures for "rebalancing" trauma centers, or other reasons. Stakeholder engagement may reveal underlying interest.

3. Because the EMS Act does not prohibit raising the age cut-off for pediatric patients, hospitals that have only an Illinois Designated Pediatric Trauma Center should consider increasing the age cut-off. The Illinois Administrative Code (77 Ill Adm. Code 515) defines "pediatric patient" as a "patient from birth through 15 years of age." However, this code does not restrict the upper age limit of a pediatric trauma center at 15 years. A Pediatric Trauma Center could apply to IDPH for a modification of its Pediatric Trauma Center Plan, and assuming all other aspects of the trauma program remained in compliance with the mandated standards and requirements, IDPH would likely approve such and application. Increasing the upper age limit from 15 years to 18 or 19 years, for example, could have a profoundly positive impact on trauma deserts, depending on the demographics and injury types in the specific catchment area.

4. More globally, community leaders and advocates are encouraged to review and support SB 3531 which proposes to expand the current trauma system to a multi-tiered system. This proposed legislative change will establish Level III trauma centers capable of initial surgical stabilization and/or transfer to a higher level of care. Remaining comprehensive and basic emergency departments who choose not to participate at a Level I, Level II, or the new proposed Level III will be incorporated into the trauma system as Acute Injury Stabilization Centers. This will result in the addition of hospitals with limited trauma healthcare capabilities into the Illinois Trauma System. There was overwhelming interest in pursuing this concept by most of the hospitals surveyed. Finally, this expansion of the trauma system will provide IDPH, State Trauma Advisory Council, and trauma healthcare entities the ability to monitor, evaluate and identify areas of the state where disparities exist and focus on improving availability to those areas in the future.

5. Although trauma centers have been shown to be cost-effective[10], the creation and maintenance of a Level II trauma center can be very expensive, especially when delivering high cost round-the-clock specialty care to large numbers of uninsured patients. Level III (as proposed in SB 3531) would be far less costly because many of the hospitals surveyed have surgical and emergency department facilities. We therefore recommend that hospitals considering participation in the statewide trauma system identify supplemental funding and/or self-sustaining business models. Given the limited funding provided by IDPH, the modest reimbursement for Medicaid trauma patients, and the absence of general revenue funds for subsidizing the expansion of the trauma system, this would appear paramount.

6. Finally, all hospitals considering a designation as a trauma center at any level (including the proposed Level III) are encouraged to contact IDPH for guidance and instructions. IDPH stands ready to support efforts to expand the state trauma system, address desert in Southside Chicago and across the state, work with the General Assembly (and sister agencies) to meet the health needs of residents in Illinois. We therefore recommend that all hospitals considering certification as a trauma center consult with IDPH during their assessment phase as needed. This consultation will help ensure that a facility meets the regulatory requirements, and passes the on-site survey, necessary for a two-year designation as a Level I, II, or III (proposed) center.

[10] MacKenzie EJ, Weir S, Rivara FP, et al. The value of trauma center care. *J Trauma*. 2010;69(1):1-10.

Attachment 1. Illinois Hospitals with Trauma Center Designations

Region 1

Hospital	Location	County	Trauma Center Designation
Rockford Health System	Rockford, IL	Winnebago	Level I
OSF St. Anthony Medical Center	Rockford, IL	Winnebago	Level I
Swedish American Health System	Rockford, IL	Winnebago	Level II
Mercy Medical Center	Dubuque, IA	Dubuque Co, IA	Level II

Region 2

Hospital	Location	County	Trauma Center Designation
Advocate BroMenn Medical Center	Normal, IL	McLean	Level II
Galesburg Cottage Hospital	Galesburg, IL	Knox	Level II
Genesis Medical Center- Illini Campus	Silvis, IL	Rock Island	Level II
Unity point Health - Methodist Medical Center	Peoria, IL	Peoria	Level II
OSF St. Francis Medical Center	Peoria, IL	Peoria	Level I and Level 1 Pediatric
OSF St. Joseph Medical Center	Bloomington, IL	McLean	Level II
OSF St. Mary's Medical Center	Galesburg, IL	Knox	Level II
Unity Point Health - Trinity Medical Center	Rock Island, IL	Rock Island	Level II

Region 3

Hospital	Location	County	Trauma Center Designation
Blessing Hospital	Quincy, IL	Adams	Level II
Memorial Medical Center	Springfield, IL	Sangamon	Level I (01/01/14 – 01/01/15)
St. John's Hospital	Springfield, IL	Sangamon	Level II (01/01/14 – 01/01/15)

Region 4

Hospital	Location	County	Trauma Center Designation
St. Louis University Hospital	St. Louis, MO	St. Louis Co, MO	Level I
Barnes- Jewish Hospital	St. Louis, MO	St. Louis Co, MO	Level I
SSM- Cardinal Glennon Children's Medical Center	St. Louis, MO	St. Louis Co, MO	Level I- Pediatric
St. Louis Children's Hospital	St. Louis, MO	St. Louis Co, MO	Level I- Pediatric

Region 5

Hospital	Location	County	Trauma Center Designation
Deaconess Hospital	Evansville, IN	Vanderburgh Co. IN	Level II
St. Mary's Medical Center	Evansville, IN	Vanderburgh Co. IN	Level II

Region 6

Hospital	Location	County	Trauma Center Designation
Carle Foundation Hospital	Urbana, IL	Champaign	Level I

Region 7

Hospital	Location	County	Trauma Center Designation
Advocate Christ Medical Center	Oak Lawn, IL	Cook	Level I
Morris Hospital	Morris, IL	Grundy	Level II
Presence St. Joseph Medical Center	Joliet, IL	Will	Level II
Presence St. Mary's Hospital	Kankakee, IL	Kankakee	Level II
Riverside Medical Center	Kankakee, IL	Kankakee	Level II
Silver Cross Hospital	Joliet, IL	Will	Level II

Region 8

Hospital	Location	County	Trauma Center Designation
Adventist Bolingbrook Hospital	Bolingbrook, IL	Will	Level II
Central Dupage Hospital	Winfield, IL	DuPage	Level II
Edward Hospital	Naperville, IL	DuPage	Level II
Elmhurst Memorial Hospital	Elmhurst, IL	DuPage	Level II
Adventist Glen Oaks Hospital	Glendale Heights, IL	DuPage	Level II
Advocate Good Samaritan Hospital	Downer's Grove, IL	DuPage	Level I
Loyola Health System at Gottlieb	Melrose Park, IL	Cook	Level II
Adventist Hinsdale Hospital	Hinsdale, IL	DuPage	Level II
Adventist LaGrange Memorial Hospital	LaGrange, IL	Cook	Level II
Loyola University Medical Center	Maywood, IL	Cook	Level I
MacNeal Hospital	Berwyn, IL	Cook	Level II

Region 9

Hospital	Location	County	Trauma Center Designation
Alexian Brothers Medical Center	Elk Grove Village, IL	Cook	Level II
Centegra Hospital- Woodstock	Woodstock, IL	McHenry	Level II
Centegra Hospital- McHenry	McHenry, IL	McHenry	Level II
Delnor Community Hospital	Geneva, IL	Kane	Level II
Advocate Good Shepherd Hospital	Barrington, IL	Lake	Level II
Advocate Lutheran General Hospital	Park Ridge, IL	Cook	Level I
Northwest Community Hospital	Arlington Heights, IL	Cook	Level II
Presence Mercy Medical Center	Aurora, IL	Kane	Level II
Presence St. Joseph Hospital	Elgin, IL	Kane	Level II
Rush Copley Medical Center	Aurora, IL	Kane	Level II
Advocate Sherman Hospital	Elgin, IL	Kane	Level II
St. Alexius Medical Center	Hoffman Estates, IL	Cook	Level II

Region 10

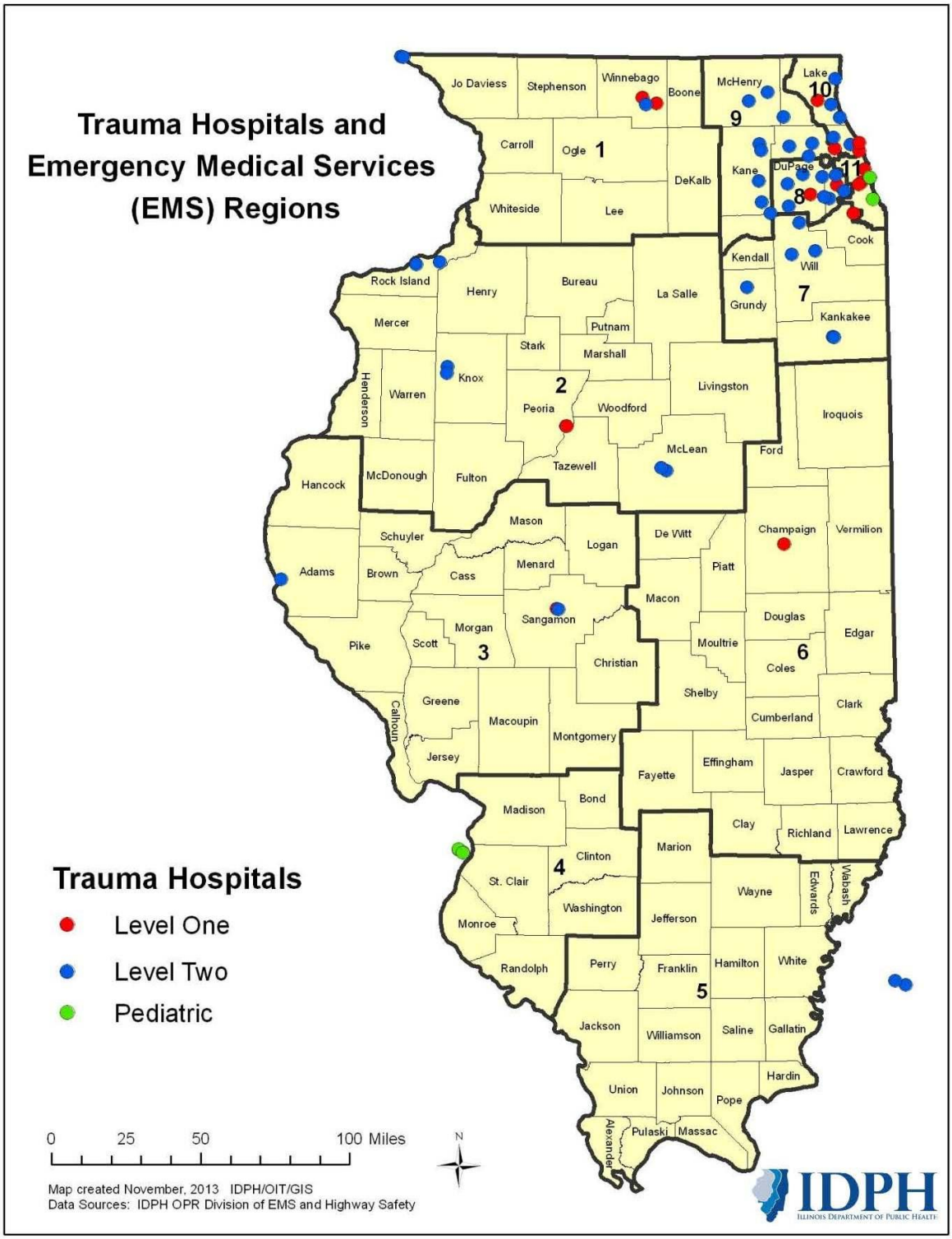
Hospital	Location	County	Trauma Center Designation
Advocate Condell Medical Center	Libertyville, IL	Lake	Level I
NorthShore Evanston Hospital	Evanston, IL	Cook	Level I
NorthShore Glenbrook Hospital	Glenview, IL	Cook	Level II
NorthShore Highland Park Hospital	Highland Park, IL	Lake	Level II
Northwestern Lake Forest Hospital	Lake Forest, IL	Lake	Level II
NorthShore Skokie Hospital	Skokie, IL	Cook	Level II
St. Francis Hospital	Evanston, IL	Cook	Level I
Vista Medical Center East	Waukegan, IL	Lake	Level II
UHS St. Catherine's Medical Center	Pleasant Prairie, WI	Kenosha Co, WI	Level II

Region 11

Hospital	Location	County	Trauma Center Designation
Advocate Illinois Masonic Medical Center	Chicago, IL	Cook	Level I
Northwestern Memorial Hospital	Chicago, IL	Cook	Level I
John H. Stroger Jr. Hospital of Cook County	Chicago, IL	Cook	Level I and Level I Pediatric
Mount Sinai Hospital	Chicago, IL	Cook	Level I and Level 1 Pediatric
University of Chicago Medicine Comer Children's Hospital	Chicago, IL	Cook	Level I- Pediatric
Ann & Robert H. Lurie Children's Hospital of Chicago	Chicago, IL	Cook	Level I- Pediatric

Adult Level I Peds Level I Adult Level II

Attachment 2



Attachment 3

Senate Public Health Committee
Subcommittee on Special Issues
November 20, 2013
11am Room C 600 Bilandic Building-Chicago
Senator Mattie Hunter, Chairperson of Subcommittee
Senator Patricia Van Pelt, Member of Subcommittee
Senator Dave Syverson, Member of Subcommittee

Subject Matter Hearing: Proximity to Trauma Care and Mortality (Trauma Care Deserts)

AGENDA

Call Hearing to Order

Opening Remarks

Announcements

- Please put all devices on silent
- We need a witness slip completed whether you are testifying or just in appearance only
- Any written testimony should be submitted to the Subcommittee.
- Oral testimony should be limited to 10 minutes to leave time for questions and to be able to hear all witnesses desiring to testify.

Overview of Issue

Dr. Marie Crandell
Associate Professor of Surgery
Northwestern University Feinberg School of Medicine

Veronica Morris-Moore
Youth Organizer
Fearless Leading by Youth (FLY)

Healthcare Consumer

Michael Dye
Youth Activist

Shannon Bennet
Deputy Director
Kenwood Oakland Community Organization

Patrick Dexter
University of Chicago Student

Reverend Alice Harper
Kenwood Church

Johnny Kline
University Church

Healthcare Providers

Dr. Philip Verhoef
Physician
University of Chicago Medicine

Dr. Gary Merlotti
Chairman
Department of Surgery
Mount Sinai Hospital

Stephanie Weaver
Internist

Dr. Derrick Robinson
AJ Wilhelmi
Illinois Hospital Association

Sheila Garland
National Nurse's Organizing Committee
University of Chicago

State Agencies

Illinois Department of Public Health
Illinois Department of Healthcare and Family Services

Closing Remarks/Adjournment

Attachment 4

Trauma Survey

Instructions for completing the Survey

The Illinois Department of Public Health is conducting a Request for Information (RFI) from hospitals that were formerly an Illinois trauma center or in areas of the state that could benefit from a trauma center. The purpose of the RFI is to assess the current level of services available at these select hospitals and how each hospital's current level of services align with the current Illinois trauma levels. Please complete the survey no later than May 23, 2014.

With regard to the questions about physician services available, please note that we are interested in the services that are available at your hospital every day of the week by physicians credentialed and on your hospitals medical staff. If you have physician coverage for a specialty service only 2 or 3 days a week, we would ask that for the survey, you would identify "No" these services are not available 24 hours a day 7 days a week.

> Yes, in-house – This would be appropriate for a physician specialty in which these physicians provide staffing in the hospital 24/7. Traditionally this might include Anesthesia, Emergency Department or a Hospitalist.
>
> Yes, in-house with call during off hours – This would be appropriate for a physician specialty in which these physicians provide staffing in the hospital during peak patient census times and cover the remaining hours by on call physician staff responding to the hospital as needed. This might include physician services such as Radiology or Cardiology.
>
> Yes, call schedule – This would be appropriate for a physician specialty in which these physicians respond to the hospital when requested or provide assistance by phone consultation. These physicians are not physically in the hospital but respond from their home or office. This might include physician services as Internal Medicine, Family Practice or Pediatrics.
>
> No – This would be appropriate for a physician specialty either not available at all or only available limited days at your hospital. This might include physician services such as Neurosurgery, Neurology or Plastics.

---

1. Does your hospital have the following subspecialty physician and surgical services available by in-house or by on call physicians 24 hours a day?

Adult general surgery services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Pediatric general surgery services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Cardio-thoracic surgery services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Obstetrical services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Neuro-surgical services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Urological services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Plastics services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Maxillofacial services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Oral/Dental services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Otorhinolaryngologic
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Vascular surgical services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Ophthalmologic services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Intensive Care Unit physician coverage
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Anesthesia physician coverage
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Radiologist credentialed in angiography
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Cardiology
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Pediatrics
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

2. Does your hospital have the following ancillary services available in-house or by on-call staff 24 hours a day?

Surgical team for Operating Room staffing
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

CAT scan technician
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Comprehensive laboratory services
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Intensive Care Unit
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Post Anesthesia Care Unit
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

Hemodialysis
☐ Yes, in-house ☐ Yes, in-house with call during off hours ☐ Yes, call schedule ☐ No

3. Does your hospital have in-patient Occupational Therapy Services?
   ☐ Yes ☐ No

4. Does your hospital have in-patient Speech Therapy Services?
   ☐ Yes ☐ No

5. Does your hospital have in-patient Physical Therapy Services/
   ☐ Yes ☐ No

6. Does your hospital have, on campus, helicopter landing capabilities approved by State and federal authorities?
   ☐ Yes ☐ No

7. What is the maximum capacity of your Intensive Care Unit services?
   _____

8. Approximately what percentage of physicians staffing your Emergency Department are board certified or board eligible by the **American Board of Emergency Medicine (ABEM)** or the **American Osteopathic Board of Emergency Medicine (AOBEM) of the American Osteopathic Association (AOA)** ONLY?
   ☐ 0% ☐ 25% ☐ 50% ☐ 75% ☐ 100%

9. What is the maximum capacity of your Emergency Department?
   _____

10. On a scale of 0 – 10, with 0 being least interested and 10 meaning highly interested what is your hospitals level of interest in pursuing designation as an Illinois Level 1 or Level 2 Adult Trauma Center?
    ☐ 0
    ☐ 1
    ☐ 2
    ☐ 3
    ☐ 4
    ☐ 5
    ☐ 6
    ☐ 7
    ☐ 8
    ☐ 9
    ☐ 10

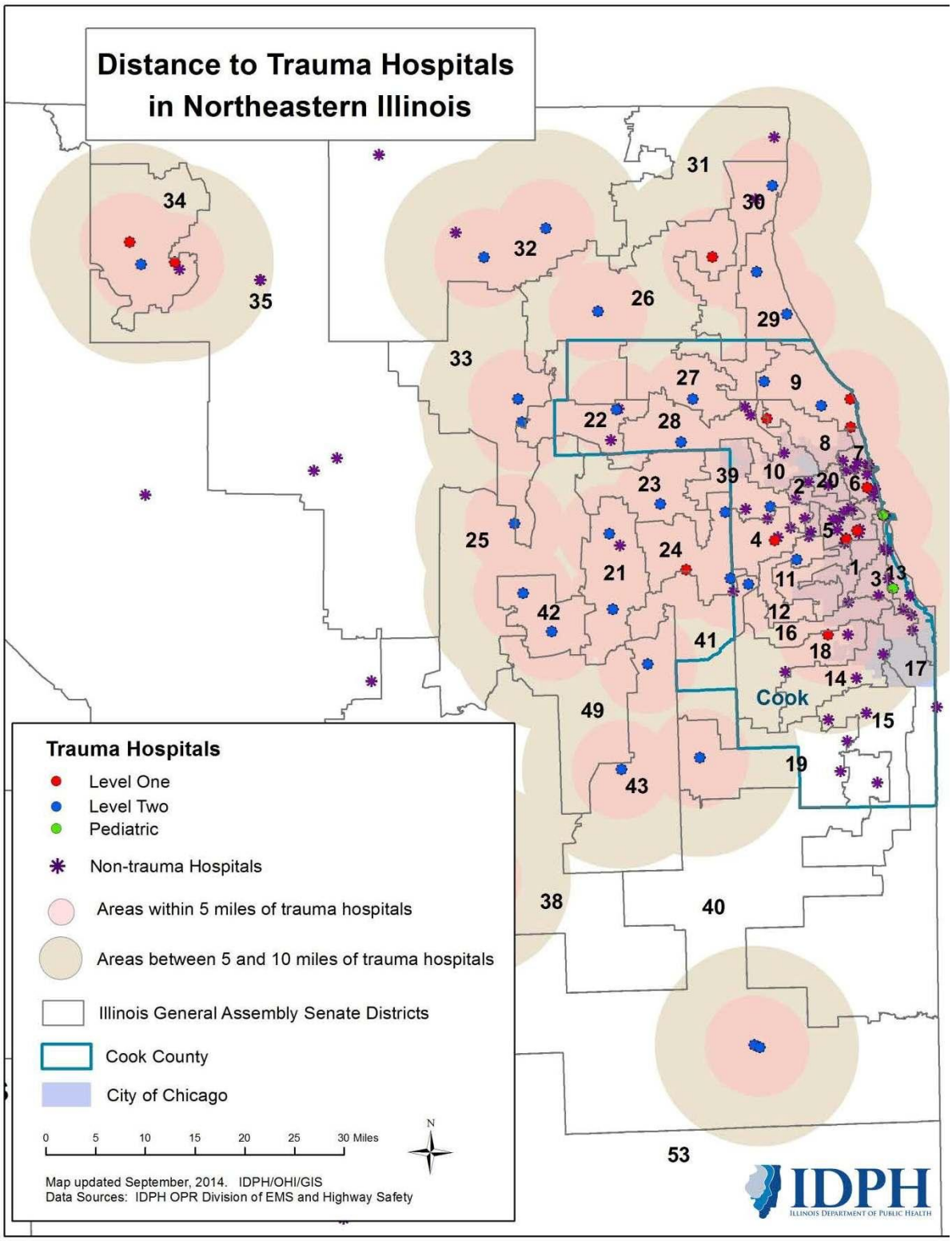
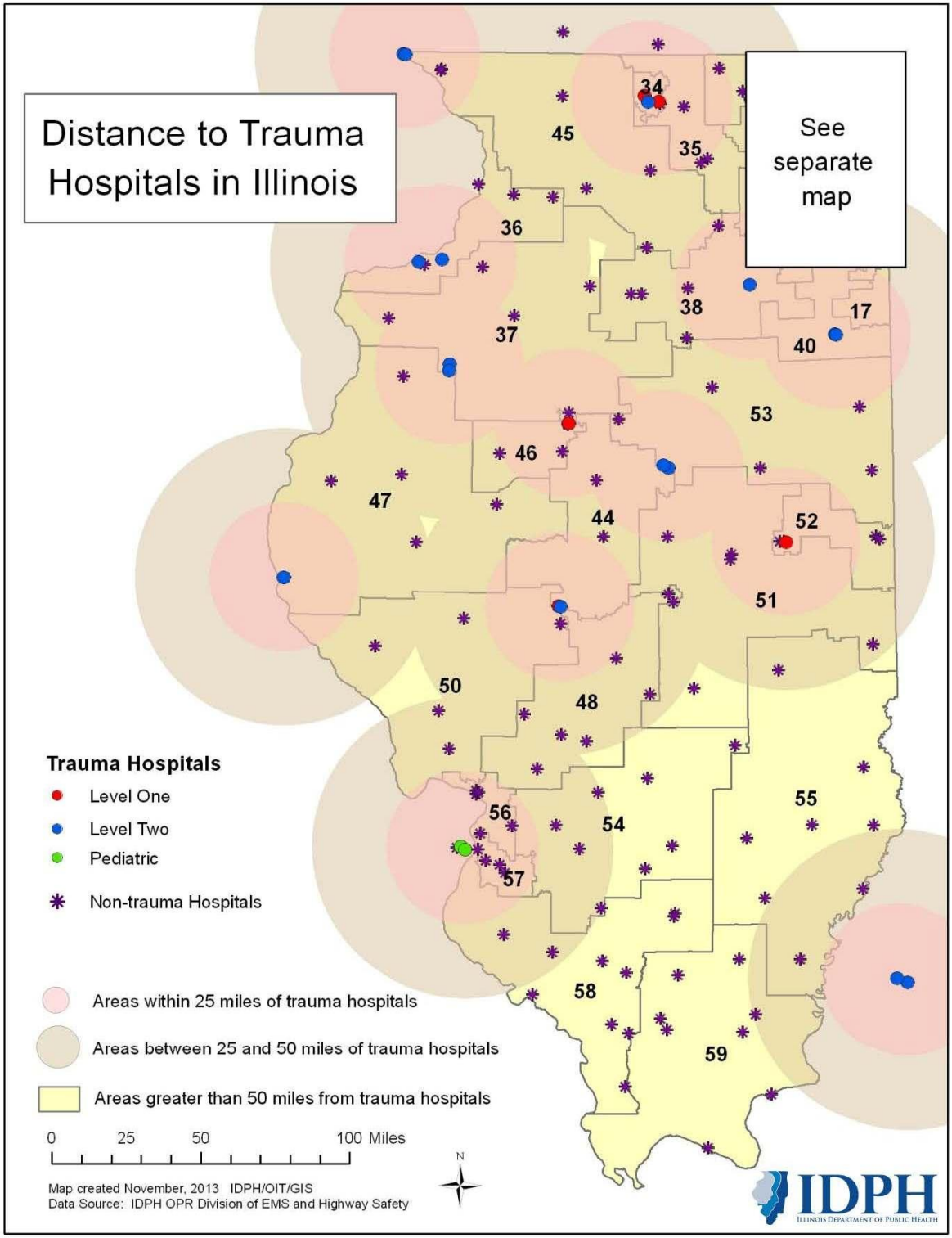
11. If the Illinois Department of Public Health implemented an Adult Level 3 Trauma Center category requiring only core surgical services (surgeon and surgery team within 30 minutes) on a scale of 0 – 10, (with 0 being least interested and 10 meaning highly interested), what is your hospitals level of interest in pursuing designation as an Illinois Level 3 Trauma Center?
    - ☐ 0
    - ☐ 1
    - ☐ 2
    - ☐ 3
    - ☐ 4
    - ☐ 5
    - ☐ 6
    - ☐ 7
    - ☐ 8
    - ☐ 9
    - ☐ 10

12. While each hospital may have many reasons for not becoming an Illinois designated trauma center, could you share what the **primary** reason your hospital would not consider being an Illinois designated trauma center. (Optional)

    _____

***** END OF SURVEY. THANK YOU.*****

Attachment 5.



Attachment 6