Inside Duke University Hospital System's Charity Care Program: Effectiveness in Serving North Carolina's Uninsured, Undocumented, Low-Income Hispanic Families

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I. Glossary

Acronym/Abbreviation	Full Title
CHNA	Community Health Needs Assessment
DSH	Disproportionate Share Hospital
DUH	Duke University Hospital
DUHS	Duke University Health System
ED	Emergency Department
EMTALA	Emergency Medical Treatment and Active Labor Act
FPL	Federal Poverty Level
Lincoln	Lincoln Community Health Center
LATCH	Local Access to Coordinated Healthcare
PPACA	Patient Protection and Affordable Care Act
PRM	Patient Resource Manager
PRMO	Patient Revenue Management Organization
PADC	Project Access of Durham County

II. Introduction

Not-for-profit hospital systems nationwide have for years wrestled with the need to adequately serve their communities while making enough profits to be sustainable businesses. 501(c)(3) hospitals offer charity care, discounted or free of charge health services, to qualified families who cannot afford to pay their medical bills. Charitable hospitals cannot provide more uncompensated services than they can counterbalance with self-pay procedures. However these hospitals see a higher proportion of uninsured patients, who most often consume charity care.

Many families are uninsured because of the cost of healthcare. Traditionally the uninsured population includes Americans whose federal or state healthcare coverage has lapsed, those whose incomes exceed qualifications for public coverage but are insufficient to afford private coverage, and immigrant families who do not qualify for government-sponsored healthcare programs. Beginning January 1, 2014, the Patient Protection and Affordable Care Act (PPACA) will help the first two of these groups, or approximately 30 million more Americans, enroll in coverage via insurance exchanges and a Medicaid expansion program. However, others are excluded from these provisions (Chazin, Friedenzohn, Martinez-Vidal, & Somers, 2010; The Kaiser Commission on Medicaid and the Uninsured, 2013). Comprising one third of America's remaining uninsured population; undocumented immigrants will constitute a larger share of hospitals' unreimbursed care costs. One subset of America's uninsured that will continue to suffer without access to health insurance is low-income, undocumented Hispanic families.

The PPACA regulations also ensure that 501(c)(3) hospitals will continue to help shoulder the financial burden for uninsured and undocumented families through charity care. Durham County's Duke University Hospital (DUH) is no exception to this concern. Since the late 1990s, Hispanic immigrants have increasingly settled in cities around the United States

(Passel & Cohn, 2012). Hispanics comprise 13.4 percent of Durham's population as of 2012 (United States Census Bureau, 2013b). These immigrants still struggle with navigating the North Carolina's healthcare system. This paper explores two key questions: 1) What issues surround the charity care experiences for DUH's uninsured, undocumented, low-income Hispanic families from North Carolina, and 2) what obstacles do Duke University Health System (DUHS) staff face internally in providing this population with financial assistance?

This research used DUHS as a case study of North Carolina's undocumented Hispanic families' charity care experiences. Sixteen healthcare professionals participated from DUH and Local Access to Coordinated Healthcare (LATCH), a care management program for Durham's uninsured. They answered questions about charity care awareness within Durham's Hispanic population, the charity care application process, communication among staff, program effectiveness, and patient satisfaction. Supplemental information came from examining websites online and exploring DUH to see what it provides to patients.

The case study identified areas for improvement in charity care delivery as 501(c)(3) hospitals adapt to PPACA provisions while under additional financial pressure. Information is available to uninsured Hispanic patients, but interviews revealed that they are often unaware that DUH provides charity care. Many people that are aware have trouble navigating the application process. However, the majority of patients that apply for charity care are approved for a 100 percent discount. The main issues with accessing charity care included: patient mentality, program logistics, and DUHS staff communication. DUHS's charity care program weaknesses represent a microcosm of the broader problem of information gaps, both in the community and within hospital organizations, which hinder the uninsured population's access to healthcare services. Improving communication both within hospitals and with their external communities

might help uninsured immigrant families better understand our healthcare system. The goal is to reduce financial barriers to healthcare access and promote the overall health of the remaining uninsured amidst the changing environment for healthcare delivery in America.

III. Background

i. Characteristics of the Uninsured

2012 estimates suggest that there are 48 million uninsured people in America (United States Census Bureau, 2013a). Approximately 11.7 million of the 25 million total noncitizens in the US are undocumented (Pew Research Center, 2012; Sommers, 2013).[1] Latin Americans comprise over 75 percent of the undocumented US residents, and almost two thirds of them lack insurance (Passel & Cohn, 2009; Sommers, 2013). Thus, Hispanics are more often uninsured than people of other racial/ethnic groups (Fronstin, 2011; McCormick, Kass, Elizhauser, Thompson, & Simpson, 2000).

With lower insurance coverage and higher poverty rates, Hispanics are disadvantaged. Individuals with lower annual incomes are more likely to be uninsured (Fronstin, 2011). 90 percent of uninsured families are low-to-moderate income, falling between 125 and 400 percent of the FPL (Collins, 2010).[2] 55 percent of America's Hispanic residents reported incomes below 200 percent of the FPL (Fronstin, 2011). These families cannot afford to purchase private healthcare coverage and may not qualify for public coverage.

ii. Barriers to Accessing Healthcare Services

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[1] Noncitizens generally fall into two categories: 1) those that have legal documentation but do not meet the five-year residency requirement to qualify for public insurance programs and 2) undocumented persons who reside in the US illegally.
[2] In 2013, a family of four fell below the poverty level if they had a household income below $23,550; it is $11,490 for an individual (U.S. Department of Health & Human Services, 2013).

Immigrants face many challenges to accessing equitable healthcare services including transportation, communication, and concerns about immigration authorities. Undocumented immigrants lack proper documentation necessary to bypass law enforcement transportation obstacles (Heyman, Nunez, & Talavera, 2009). Many undocumented Hispanics also fear being denied necessary care because of their immigration status, or they think that they will be deported if they seek care (Berk & Schur, 2001; Berk, Schur, Chavez, & Frankel, 2000; Cavazos-Rehg, Zayas, & Spitznagel, 2007). Weinick and Krauss (2000) attribute Hispanics' reduced healthcare access and utilization to language skills. Rodriguez, Busamante and Ang's (2009) study suggested that both linguistic and financial barriers are responsible.

Financial constraints hinder healthcare access for low-income and uninsured families including undocumented Hispanics (Strunk & Cunningham, 2002). Unaffordable medical bills can quickly translate into medical debt for families who may need to prioritize other necessary expenses (Himmelstein, Warren, Thorne, & Woolhandler, 2005).

In response to these barriers and to avoid incurring healthcare costs, families delay seeking medical assistance (Weissman, Sterm, Fielding, & Epstein, 1991). They postpone care until they have no alternative but to visit the emergency department (ED) in urgent situations (Wallace et al., 2012, as cited in Mitchell et al., 2012). ED visits are generally more expensive than primary care visits; so it would be less expensive for low-income families to seek primary care upon initial display of symptoms rather than waiting. Not only do uninsured patients present in more severe disease states than insured patients (Coritsidis et al., 2004), but also they often forgo doctors' recommended treatments and prescription purchases to avoid increasing their debt balances (Hoffman, Rowland, & Hamel, 2005). This can lead to even worse medical conditions that put families back in the ED, which could further increase their accruing medical bills

(Young, Flores, & Berman, 2004). Young, Flores, and Berman (2004) labeled this scenario in which patients are treated, stabilized, and discharged until the next visit the "cycle of preventable hospitalizations" (p. 1138).

iii. Charitable Hospitals Provide Uncompensated Care

Hospitals function as safety net providers of medical care. Passed in 1986, the Emergency Medical Treatment and Active Labor Act (EMTALA) mandates that hospitals medically evaluate and stabilize, or transfer, all patients that come to the ED regardless of ability to pay or citizenship status (American College of Emergency Physicians, 2012). EMTALA prohibits hospitals from assessing payment method upfront in the ED. Therefore, treatment to uninsured, low-income Hispanics via hospital EDs often becomes uncompensated care (Sommers, 2013; Wallace, Torres, Sadegh-Nobari Pourat, & Brown, 2012). More noncitizens have uncompensated care visits than US citizens have (Stimpson, Wilson, & Eschbach, 2010). Registered community hospitals went without payment for 41.1 billion dollars of services in 2011 (American Hospital Association, 2013).

Charitable status requires 501(c)(3) hospitals "to provide access to essential services for a population that otherwise would go without" (Chazin et al., 2010, p. 6). In exchange for serving more uninsured patients, charitable hospitals receive tax benefits and government subsidies called Medicaid Disproportionate Share Hospital (DSH) payments. However these hospitals still shoulder a large portion of unrecoverable treatment costs as bad debt and charity care (Mitchell, 2013; Wallace et al., 2012, as cited in Mitchell et al., 2012). Charity care is one category of IRS-defined community benefit (US Department of Health & Human Services, 2012).[3] Hospitals can

[3] IRS defined categories of community benefit include: financial assistance at cost, unreimbursed Medicaid, other unreimbursed means-tested government programs, subsidized health services, community health improvement services, health professional education, research, and cash and

only provide as much community benefit as reimbursed services will compensate for, or they will go bankrupt. As Linker (2010) states, "without a margin there is no mission" (p. 3). Hospitals cannot keep their doors open to serve all patients, including the uninsured, without the funds to do so.

iv. Impact of the Patient Protection and Affordable Care Act on 501(c)(3) Hospitals

Undocumented Hispanics will not benefit from the PPACA's new insurance initiatives but could be impacted by added financial pressure on 501(c)(3) hospitals. Since the government expects insurance enrollment to significantly reduce hospitals' uncompensated care costs, it is also decreasing DSH payment allotments for all states, including those like North Carolina that have opted out of the Medicaid expansion (Mitchell, 2013). North Carolina and Texas will have the highest proportion of uninsured people, and undocumented immigrants will comprise at least one third of North Carolina's remaining uninsured (Wallace, Torres, Nobari, & Pourat, 2013). Hospitals must reconcile the need to treat those without insurance, with reduced DSH subsidies available to cushion uncompensated care costs (Mitchell, 2013; Wallace, 2013).

Nonprofit hospitals must also abide by four new regulatory requirements under Section 501(r) of the PPACA to help streamline the medical billing experiences of the remaining uninsured people. Hospitals are required to (1) establish written financial assistance policies for medical care, (2) cap treatment costs for patients who qualify for financial assistance, (3) reasonably evaluate patients' financial situations before pursuing "extraordinary collection actions" (Internal Revenue Service, 2013b, p. 1) and (4) perform a community health needs assessment (CHNA) and develop an execution strategy at least once every three years (Cerny &

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in-kind contributions. Three additional categories that are reported but are not considered community benefit are: bad debt, unreimbursed Medicare, and community building expenses (Internal Revenue Service, 2013a).

Walker, 2011; Lunder & Liu, 2009). Charitable hospitals including DUH are actively adapting to comply with these regulations to better serve their communities.

IV. Case Study of Duke University Hospital

i. Duke University Hospital's Charity Care Program

DUHS must confront the new challenges imposed by the PPACA to serve Durham's large, uninsured Hispanic population. DUHS includes DUH, Durham Regional Hospital, and Duke Raleigh Hospital. DUH is the largest of the three facilities. Almost 71 percent of all DUH ED visits receive some charity care aid (Office of Marketing and Communications, 2013).

DUHS President and CEO, Dr. Victor J. Dzau, notes the hospital's "commitment to its founding vision to provide high quality, compassionate, and safe medical care to the people of the communities [DUHS] serves" (Office of Marketing and Communications, 2013, p. 2). The 2013 Duke Medicine Community Benefit Report outlines DUHS's financial contributions for the fiscal year ended June 30, 2012, which are summarized in Table 1.

DUHS Community Benefit and Investment	Amount (mm)[1]
Charity Care	$69.00
Cash & In-Kind Donations to Community Groups	$11.28
Health Professions Education	$55.80
Unreimbursed Medicare	$34.00
Total IRS-Defined Community Benefit	**$170.08**
Unreimbursed Medicaid	$96.00
Unrecoverable Patient Debt	$25.00
Total Community Investment	**$121.00**
Total Community Benefit and Investment	**$291.08**

[1] All dollar figures are at cost

Table 1. (Duke University Health System, 2013a)

The majority of charity care reached over 150,000 patients from 96 counties in North Carolina.[4] “Cash & In-Kind Donations to Community Groups” includes 6.89 million dollars to Durham’s Lincoln Community Health Center (Lincoln) and its satellite clinics (Office of Marketing and Communications, 2013). These aid initiatives intend to help reduce health inequalities and provide high quality medical care to those who might not otherwise be able to afford it.

The hospital guides patients to apply for charity care if they do not qualify for government or other forms of aid.[5] Families must demonstrate incomes that fall at or below 300 percent of the federal poverty level (FPL) to be considered for charity care (Duke University Health System, 2013b). After receiving a bill, patients must fill out and mail the “Duke University Health System Financial Hardship Form” to the Patient Revenue Management Organization (PRMO) Self Pay Office in Durham. Patients must enclose their most recent tax return, last two pay stubs, and an income source verification letter. If patients do not have pay stubs, they must instead provide an employer income verification letter. Patients who fail to present this information risk being denied financial aid. For ED visits, the hospital automatically applies a 65 percent charity care discount to services for uninsured patients. Search America automated system generates the patient’s estimated income as a percentage of the Federal Poverty Level. PRMO plots this value on the sliding scale to determine the patient’s charity care discount (65-100 percent) for the remaining balance.[6] PRMO then notifies applicants via mail what proportion, if any, of the patient’s hospital bills charity care will cover.[7]

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[4] “At cost” refers to the cost of services to the hospital prior to posting a discount or markup charged to patients

[5] The hospital will try to get patients financial assistance via emergency Medicaid, Crime Victim Compensation, or Cancer Control Program (Duke University Health System, 2013b).

[6] See Appendix Figure 1

[7] applies to all eligible procedures performed within one year of approval. It covers emergency medical care, treatment after ED admission, and follow-up visits within the patient’s coverage

ii. Duke-Affiliated Programs for the Uninsured

Pathways for Care Coordination through DUHS

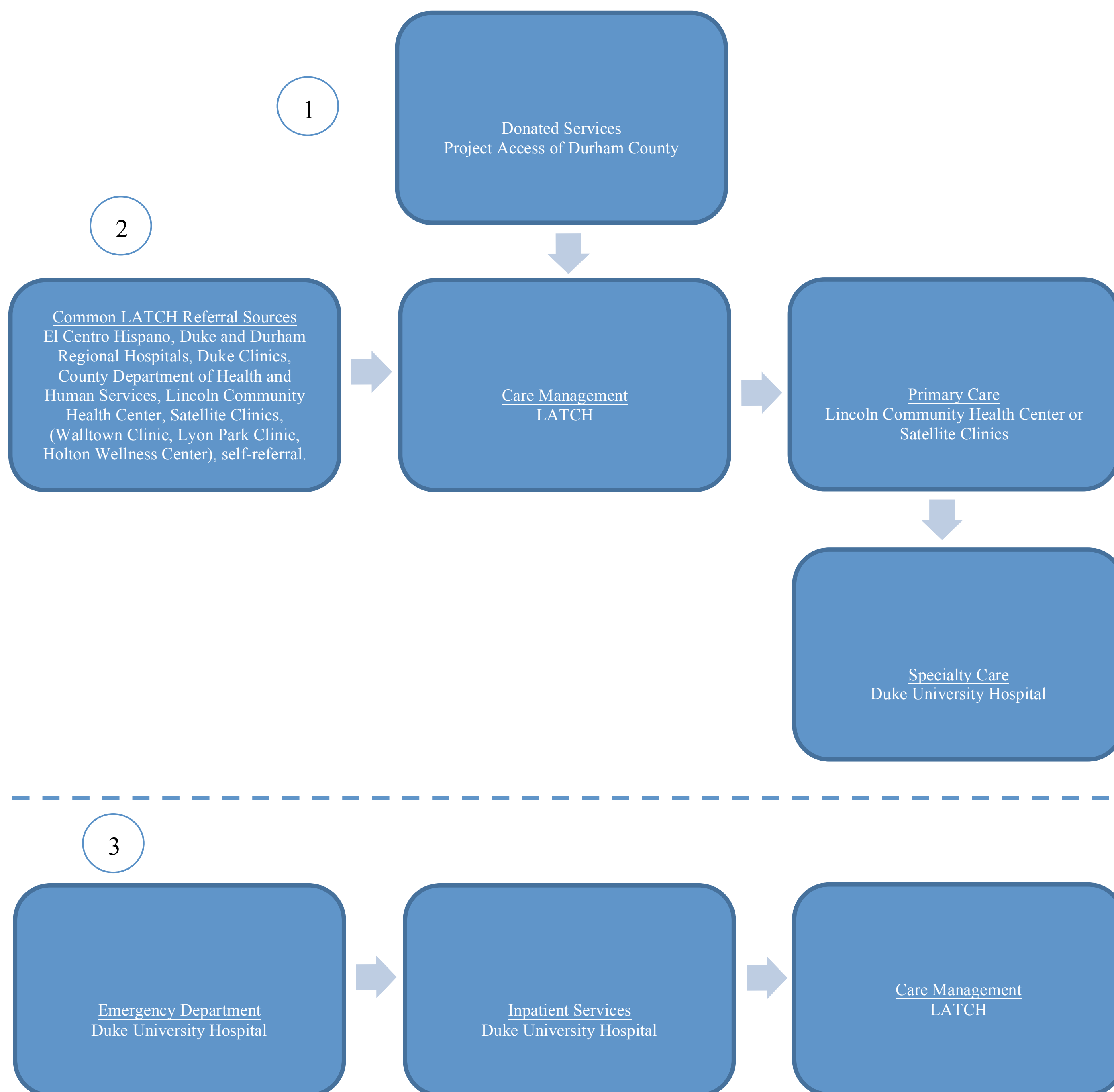

Table 2. Source of information: Duke University Health System, 2013a; Project Access of Durham County

window. It may also cover physician-determined critical preventative health services. Charity care will not cover cosmetic, transplant, experimental, and elective procedures. After policy expiration, patients must reapply. For remaining bills that charity care does not erase, patients can enroll in a zero-interest payment plan (Duke University Health System, 2013b).

Other Duke-affiliated programs also lead patients to DUH. Table 2 demonstrates that charity care is a complicated process, with many avenues to access healthcare, multiple sources for information, and numerous providers involved in each step. Doctors donate specialty care services to uninsured patients via Project Access of Durham County (PADC).[8] PADC patients are automatically enrolled in LATCH, so they access care via Pathway One (Table 2). LATCH is a DUHS sponsored initiative designed to help Durham's uninsured community navigate barriers to healthcare access. 64.4 percent of LATCH patients are Hispanic (Duke University Health System, 2013a), so many of the LATCH care managers are bilingual (Duke Community Health, 2013). They help patients schedule appointments with physicians at Lincoln, ensure that patients fill prescriptions, coordinate transportation to and from visits, guide patients in applying for charity care, monitor treatment plan compliance after healthcare visits, and more via Pathways One and Two (Table 2). Care managers *connect* patients with sources that donate or finance care; however LATCH does not directly provide them with financial assistance.

V. Data Collection and Analysis

This research collected data through in-person and phone interviews with six LATCH care managers, two PRMO employees, one PRM (Patient Resource Manager), one DUH administrator, and six social workers. All interviewees were contacted based on referrals from previous interviewees or Duke Directory searches. Social workers were interviewed via three one-on-one sessions and one three-person focus group. While the inquiries focused on children, interviewee responses yielded more general insights about uninsured, undocumented, low-income Hispanic families. Duke's programs were examined solely from the provider perspective

[8] To enroll in PADC, patients must have an income at or below 200 percent of the FPL (Project Access of Durham County).

to survey access and utilization among Durham's uninsured Hispanics. Data were not collected from conversations with patient families directly, because social workers felt that the questionnaires would have elicited stress and confusion for them.

Fourteen interviews followed structured questionnaires, and two interviews were free flowing conversations.[9] All responses were recorded manually to minimize participants' discomfort. Staff participants could choose not to answer any questions that they preferred not to discuss, and they could terminate the interviews at any time.

Interviewees were asked specific questions related to their roles in the patient experience. For the LATCH care managers, 38 questions addressed topics such as: patients' previous visits to DUH, whether patients participated in charity care, how patients learned about charity care, if costs influenced decisions regarding where to seek treatment, and if patients delayed treatment for any reason.[10] Social workers were asked 21 questions that addressed topics such as: opinion of charity care, patients' degree of familiarity with DUHS's charity care program, patient participation rates, how patients learned about the program, patient satisfaction with aid awards, and the hospital's charity care publicity efforts in the Durham community.[11] One PRMO staff member was asked 26 questions that addressed topics such as: DUH's process for identifying and communicating with eligible participants, the hospital's objectives for the program, what the ideal charity care program would look like, whether the hospital has or would consider changes to its charity care process, and whether the hospital feels that the programs are achieving their

[9] See Appendix for structured questions.
[10] See Appendix Section ii. for Local Access to Coordinated Healthcare Program Care Managers Questionnaire.
[11] See Appendix Section iii. for Duke University Hospital Social Workers Questionnaire.

goals.[12] The PRM was asked 29 questions that covered topics including: patients' awareness of charity care at DUH, communication among DUHS staff about charity care, ability of the staff to distinguish between PRM and PRMO, and patients' overall satisfaction with charity care. Finally, the hospital administrator was asked about DUHS's role in the community, charity care program objectives, and who the hospital's outreach efforts target. Beyond interviews, this research also gathered information from additional sources including: pamphlets collected from the hospital, online information outlets, and the Financial Hardship application for charity care.

VI. Results

i. Summary of Interviewee Characteristics

Employee Designation	Number Interviewed	Gender (M/F)	Average Years of Employment	Patient Populations Covered
LATCH Care Manager	6	2M, 4F	4.4	Uninsured and underinsured patients referred from PADC, El Centro Hispano, Durham Regional/DUH, Lincoln, community partners, self-referrals, homeless clinic, and mental health agencies; mostly adults
DUH Staff[1,2]	10	1M, 9F	10.9	Pediatric endocrine, neonatal intensive care, cardiology transplant, pediatrics, adult oncology, all native Spanish speakers, and ED patients; patients of all ages

[1] "Average Years of Employment" and "Patient Populations Covered" does not include data from one PRMO staff member and the DUH administrator
[2] Includes six social workers, two PRMO representatives, one PRM, and one DUH administrator

Table 3.

The interviews revealed that LATCH and DUHS staff treat few undocumented children. Five care managers estimated that between zero and five percent of their individual patients are children, with an average of two percent. A social worker proposed that the influx of Hispanics in North Carolina could explain this. She described that children who arrived two decades ago are now teenagers or adults. Since DUH staff averaged 10.9 years of employment at the hospital

[12] See Appendix Section v. for Duke University Hospital – Patient Revenue Management Organization Questionnaire.

(Table 3) - so they have treated more undocumented children in the past - their perspectives provided valuable insight for families' experiences at large.

Interviewee characteristics might help explain some of their responses. DUH staff participants' average years of employment of 10.9 years was significantly larger than the LATCH care managers' average tenure of 4.4 years. Additionally, the majority of study participants were female. While one third of the LATCH care managers interviewed were male, only 1 out of 10 DUH staff members was male. Study participants covered a diverse patient population (Table 3).

ii. Charity Care Information Availability, Community Awareness, and Publicity

DUH does make information about charity care available to the community. The hospital publishes a CHNA in compliance with the PPACA regulations. DUHS hosts the annual Duke/Durham Health Summit to define its community benefit goals for the year and to discuss ways to improve community outreach. The hospital administrator explained that DUHS finances interpreters to translate for Hispanic families via headsets so that they can participate. DUHS also invites LATCH and Durham Hispanic leaders to represent the Hispanic community at the annual summit and other events. Furthermore, DUHS publishes an annual Community Benefit Report, which highlights the system's charity care and community benefit dollar contributions for the previous fiscal year. However, the hospital administrator mentioned that Duke stopped producing a Spanish/English version of the Duke Community Benefit Report to cut costs. The hospital offers online information on its charity care program including electronic access to the Financial Hardship Form. Patients can also request a copy of the application from the information desk at the hospital, if they know to ask. The hospital provides limited pamphlets in waiting rooms in both English and Spanish to address patient questions about

paying for healthcare. Additionally, PRMO staffs a customer service line that families can call with billing questions.[13]

Beyond the aforementioned resources, LATCH staff members and hospital staff offer uninsured Hispanic families information about charity care. Five care managers, one PRMO representative, and three social workers noted that families ask about bills and/or request help with paying for their healthcare rather than inquiring about charity care specifically. One care manager and a social worker both commented that patient families often assume that Duke can provide some financial assistance, but they do not usually know what it is. One LATCH care manager noted that many of the patients think that LATCH is an insurance program and is the organization that would provide bills assistance; she consistently reminds them that LATCH can help them navigate the charity care process but that it generally does not offer monetary aid.[14]

Staff can help patients to access necessary financial assistance through DUHS by evaluating whether or not a family might qualify for charity care. When patients ask LATCH care managers about bills assistance, care managers informally survey the families' financial circumstances in conversation to determine whether or not they should apply for charity care. If the answer is yes, care managers propose this option and offer them the Financial Hardship Form. Alternatively, one care manager noted that his colleagues know to be upfront about charity care when they observe patients' compromised living conditions during home visits. Depending upon the patient's point of entry to the hospital - whether it is outpatient through the ED or inpatient - they connect with social workers, PRM, PRMO, Medicaid Assistance

[13] This number is online, in pamphlets, and on the back of billing statements.
[14] LATCH does have a small fund that they can direct toward financing prescriptions or use to help patients obtain medical devices.

Counselors (MAC), and Financial Care Counselors who can also help inform families of charity care.

Despite available information, many interviewees supported that Durham's uninsured Hispanic families are unaware or minimally aware, beyond what DUH and LATCH staff tell them, that Duke can provide discounted medical care to qualifying families. While five care managers and the PRM claimed that patients have limited to no awareness; two social workers approximated that 50 percent of patients know about charity care. Two social workers, one PRMO interviewee, and two care managers noted that there is word of mouth education in the "tightly knit" community.[15] Three social workers agreed that patients expect the hospital to have a program, but they do not know how to access it. One care manager proposed that patient awareness might depend upon length of stay at the hospital. She noted that the hospital seems more conservative about offering charity care details during ED visits, and those with an extended stay have more information about their options than those who simply visit the ED. Given that patients connect with different staff members regarding charity care depending upon hospital point of entry, perhaps some staff groups do a better job at informing patients than others.

DUHS staff recognize the hospital's conflicting position between serving the community and sustaining the business. One PRMO interviewee acknowledged that there are operational challenges associated with balancing cost-effectiveness and charity. He mentioned that as the largest employer in Durham, DUH plays an important role in the community and could do more from a public health perspective. However, he and one care manager explained that charity care is the hospital's last resort solution for helping patients who legitimately cannot pay their bills.

[15] One social worker described Durham's Hispanic community as "tightly knit."

Five care managers acknowledged that is not the hospital's objective to advertise charity, by making comments like: "They do not advertise: if you want charity care, contact us;" "They do not promote it much, but they do not keep it a secret – it is just low profile;" "If we make charity care our flagship, that is saying that doctors will work pro bono – it has to be for patients who really, really need it, to keep the figure low;" and "It is not Duke's goal to highlight care - they want people to pay." One PRMO representative and the PRM supported this perspective in proclaiming "While we are a nonprofit, this does not mean we are no profit…. we do not want a billboard saying: free care, get your free care here;" and "we want to try and collect money before offering charity care, because there are people out there who do need charity care," respectively. LATCH aims to keep patients out of the ED and to help them obtain preventative and primary care, not to advertise that uninsured, undocumented Hispanic families should regularly visit the ED to get free healthcare.

Two social workers, one care manager, and the PRM mentioned that the hospital wants people to pay, even if it is as minimal as five or ten dollars per month. If families show that they are trying to contribute then the hospital "will write the whole bill off without thinking twice about it," the PRM explained. A social worker described that even this minimal contribution will let patients "feel ownership." The other social worker explained that if they are contributing to their healthcare payment, they will speak up more and ask the physician questions rather than feeling like the doctor is treating them for free. But the PRM still noted that some families struggle to contribute even four dollars toward generic prescriptions.

iii. Impact of Financial Burden of Medical Treatment Costs

Question Category	1-10 Scale	Average Rating	Number of Respondents	Total Interviewees Asked
Parents' level of distress with financing their children's treatment costs	1: Not at all distressed 10: Extremely distressed	8.45	10	12
Parents' contentment with the amount of money they are receiving from Duke	1: Very unhappy 10: Extremely content	8.65	10	14
How well the charity care program is working	1: Poorly 10: Very well	7.15	10	14
Overall rating of patients' financial assistance experiences	1: Very negative 10: Very positive	7.83	3	8

Table 4.

Table 4 demonstrates that families have very high stress levels associated with financing medical treatment costs according to interviewees. Respondents estimated that the average level of distress their patients' parents experienced from the financial burden associated with financing medical treatment costs for their children was 8.45 on a scale of 1 to 10.[16] Interestingly, one care manager proposed a relationship between patients' familiarity with the American health system and their stress about treatment costs. In her experience, recent immigrants are not as concerned about paying for healthcare, because they do not understand the US credit system. Their concerns rise as they become more acquainted.

iv. Delayed Care

Interviewees confirmed that patient families delay seeking care at DUH because of fears including: deportation, the possibility of care denial due to immigration status, negative past experiences, and treatment costs. Two LATCH care managers and one DUH social worker

[16] Based on ten total responses.

highlighted that transportation to and from appointments also hinders access to care. Another social worker presented the caveat that if you are a parent, "You are going to get your children care. If your child spikes a fever, it doesn't matter if you are going to have to pay for the rest of your life." However, the majority held that Durham's Hispanic families try to avoid incurring healthcare costs.

Thirteen interviewees reported that families delay seeking care to avoid increasing their medical debt. All six LATCH care managers supported this point. One social worker said "probably."[17] They concluded this from observing the disease presentation states of ill patients or based on patient statements. Three care managers noted that patients cancel appointments or do not follow up because of cost. One care manager mentioned that some patients will not even go to a community health center because they do not think that they can afford the minimal cost associated with potential treatment.

According to a PRMO representative, ED staff avoid bringing up financial conversations until doctors see patients. This is consistent with EMTALA requirements. However, his reasoning was that they do not want anyone to feel like they cannot get care because of costs. Still, in recognizing cost concerns, three DUH staff affirmed that they previously instructed undocumented families with non-emergent cases to reschedule procedures, so they can avoid getting billed. Interviewees noted that uninsured Hispanic patients have left the ED against medical advice in fear of accruing medical bills. One social worker and the PRM noted that patients try to avoid being admitted to the hospital during ED visits for the same reason.

[17] One social worker said yes, though her response was based on anecdotal rather than empirical evidence. One PRMO representative and the hospital administrator were not asked the question. All 14 interviewees who were asked the question responded.

Uninsured Hispanic patients present in worse medical conditions at DUH ED. The PRM and four LATCH care managers supported this point. "Sick, very sick, deathly sick," is how the PRM described the disease presentation states of the uninsured, undocumented Hispanic patients as a result of care procrastination. "If they were educated enough to know that they need to go to the hospital earlier, that would be phenomenal. They hold out and then it is harder to get things under control," she explained. This could suggest a relationship between limited community awareness of charity care and the extremely critical health statuses of DUH ED's undocumented Hispanic patients.

v. Patient Mentality

Interviews suggested that undocumented Hispanic patients' mentalities hinder the smooth functioning of the charity care process. Five care managers explained reasons why patients do not engage with the billing system. According to two care managers, when patients are not approved for charity care, they simply ignore the bills. A care manager discussed how some patients simply ignore the bills in the first place, rather than applying for charity care. Perhaps this could be because, as PRMO noted, patients are too proud to apply. A care manager suggested that these patients do not care if they owe lots of money. Another care manager agreed, noting that patients might try to get on a payment plan but that they do not have enough motivation. "You give them everything, and they do not want to do much to get it. There are options, but patients need to advocate for themselves. We need to empower them," she described, which a social worker also supported.

Many study participants underscored that undocumented Hispanic families provide false information in the ED. Two PRMO representatives, the PRM, two social workers, and a LATCH care manager noted that patients will give false information including addresses, income, social

security numbers, and identities. One PRMO employee explained that Hispanic families often have two last names, so they will check in under different names for each visit. A social worker expressed concerns that invalid identifiers are a medical hazard, because they could associate an undocumented Hispanic patient with someone else's medical record and alter a doctor's course of treatment. Thus, not only does having "bogus" information make contact and follow up with patients difficult for providers;[18] but it also can compromise patients' quality of care.

vi. Program Logistics

Hispanic families have trouble applying for charity care at DUH. Most care managers noted that they help patients fill out the Financial Hardship Form. Two care managers referenced the form's simplicity and ease of use; however two others affirmed that patients are not used to filling out forms, that the hospital will not process the application until forms are complete, and that patients do not know when they are approved for charity care. A PRMO representative noted that they are designing a simpler version of the Financial Hardship Form. They are also considering transitioning to a Living Wage Calculation rather than the sliding scale or Search America generated charity care discount.

Despite progressive changes, conversations with DUHS staff revealed problems with PRMO's charity care approval/denial notification process. Of the three care managers who responded regarding how long it takes for their patients to hear back from PRMO, two stated 45 days and one stated 30 days. A PRMO interviewee described that upon receiving a completed application, PRMO aims to decide within 30 days. This depends upon the capacity of the three staff application reviewers. One interviewee identified that patients become stressed when their accounts are sent to collections before they hear from PRMO. A social worker also noted the

[18] One LATCH care manager cited that patients sometimes provide "bogus" addresses.

importance of timing, as patients do not know what to do when they receive a statement while their charity care applications are pending review. During this time, DUHS staff perform due diligence on patients to ensure that "no one pulls a wall over [their] eyes," a PRMO representative described. The PRM explained, they "scrutinize the situation and weed out the players" to guarantee that the families awarded charity care are the ones who need it most. After making a decision, PRMO notifies patients of their charity care status by mailing letters written in English to the addresses patients provide during their hospital visits.

Literacy causes issues for Hispanic patients who need to engage with DUHS's billing system. Two care managers and two social workers noted Hispanic patients' limited literacy and particularly financial literacy. PRMO confirmed that they have a Spanish version of the letter but that they have poor records for patient language preferences. While English is the default, a PRMO representative expressed interest in using a Spanish statement in the future. One social worker noted that a "parent may or may not have a 6th grade reading level." Another commented: "Right now, [PRMO does not] take language, which is kind of bizarre. You would think that they would want to do that." The DUH administrator confirmed that the hospital is working to communicate in the community's language by avoiding jargon and by producing materials in Spanish.

Given these language barriers, it is no surprise that two care managers suggested that patients often struggle to determine what charity care services the letter approves them for. A PRMO interviewee described that once approved, some patients think they have access to free care, but they do not. Interviewees noted that patients have trouble figuring out whom to follow up with for questions regarding charity care when they receive these notices. One care manager referenced that many patients never receive their letters, so they are left wondering about the

status of their applications. Perhaps this is because of the previously mentioned issue that, as four DUHS staff members described, undocumented patients sometimes give false addresses and information because "they do not want to be found."

DUH staff noted that some families have trouble providing the materials that the Financial Hardship application requests. A social worker noted that undocumented workers often do not have pay stubs. Additionally, she elaborated: Employers may not be willing to write verification letters, because this acknowledges in writing that U.S. citizens have been hiring illegal workers and paying them off the books. Employers may not be comfortable recording this information. Another social worker agreed, commenting that getting patients to gather all necessary materials and fill out the documents completely is an issue. She said, "Some families are chronically disorganized. We might as well be asking them for a passport to the moon."

A PRMO study participant stated that continuity of care issues arise when charity care coverage lapses. One care manager noted that doctors infrequently elect not to treat non-emergent patients in this position until their charity care policies resume. Another care manager suggested that patients should apply for charity before undergoing procedures. PRMO cited that this does happen in outstanding circumstances but not as standard procedure. However the hospital administrator explained that DUHS is moving toward adopting this charity care paradigm.

vii. Staff Communication

DUH staff on the business and clinical sides of charity care have insufficient communication. Five interviewees on the clinical side, largely DUH staff, refrained from rating the charity care program. They did not feel knowledgeable enough about the program, or they were "not the right person" to provide an answer (Table 4). Not only were staff members

unaware that some policies exist,[19] but also one PRMO representative reported facts about the billing policy that changed three years ago. In general, the care providers frequently did not know answers to questions about the billing process. Most interviewees could only answer questions that were relevant to the way their specific roles interfaced with charity.

A PRMO representative and one LATCH care manager asserted the need to bridge the gap across the hospital's pharmacy, compliance, business, and clinical departments. The PRM acknowledged that hospital employees definitely communicate with one another to address patients' needs, but she conceded that her team "may not have all the answers." A social worker agreed with this point in stating, "Sometimes we do not know what the other person does. We are not aware of all the processes and different people that [the patient] has to go through." One social worker stated that "social workers are a catch all" and that calls about charity care will often get routed their way from the main line.

Hospital staff and patients struggle to distinguish between the PRMO and PRM departments, given their acronym similarities. Interviewees seemed to misuse the terminology during interviews. PRM then estimated that between 15 and 20 percent of DUHS staff mix up the PRMO and PRM roles. She affirmed that patients also transpose these positions on hospital surveys. "They get confused, we get confused," she proclaimed.

DUH staff reported difficulties coordinating with patients as they move throughout the charity care process. A social worker asserted that she did not know a whole lot about what happens to patients after she gives them the Financial Hardship application. She conceded that returning charity care patients probably know more about the process than she does. Similarly, the PRM interviewee described that her team probably would not know whether or not her

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[19] The PRM was unaware of the ED's uninsured patient discount prior to the interview.

team's patients are approved for charity care, unless the patient is readmitted. Thus, there is a lack of coordination between hospital staff, patients, LATCH, and the broader community.

The PRM study participant emphasized the need for DUH to better hand off uninsured patients to the community upon discharge. At-home nursing and equipment are hard to secure for uninsured patients. She noted that the hospital does not release patients until it can secure their discharge environments. Still, one interviewee expressed concern for patients' health maintenance after they leave the hospital and when charity care expires.

Conversations with interviewees raised a number of critical questions about charity care, which reach beyond the scope of this paper. One social worker described: "We create a tough situation – what is basic good care? What is the appropriate care to provide?" She noted that when the hospital provides certain care to low-income, foreign-born patients, it is actually creating additional problems. Consider the situation in which a person originally from a small foreign village gets put on dialysis at DUH. The social worker described that the patient could not access this care in his home country; with Duke's help, this patient now cannot go home. The PRM questioned: "What is the right kind of care to do, or do we do everything we know how to do regardless of insurance?" Even then, "to what extent do we provide care that we cannot sustain?" she asked. She described the role of charity care hospitals as "a Band-Aid not a fix."

Despite the fact that LATCH could help a number of patients with some of these issues, two social workers, a PRMO representative, and the PRM noted that they no longer work too closely with LATCH in recent years. However, one social worker noted that she gives patients brochures for LATCH, while another stated that the hospital generally makes referrals, via Pathway Three (Table 2). Despite not making any referrals herself, the PRM described LATCH and DUH as "codependent." A PRMO representative noted that the relationship was much

stronger a few years ago, when there was regulation that encouraged collaboration between the two organizations, but it has since gradually lessened. One social worker noted that she made a handful of referrals years ago but that she has not made one in the past year, while another social worker and the PRM made one referral each in the past year. Improved communication between LATCH and DUH might help streamline uninsured, undocumented, low-income Hispanic patients' experiences with charity care.

viii. Barriers Facing Mixed-Status Families

Interviewees described that differential treatment creates divides among members of mixed status families.[20] Consider the case study one social worker provided:

> In a family of three children, one child was documented and on Medicaid, but the other two were not. The documented child was diagnosed with a genetic heart disorder. The other two children needed to be tested to see if they had it also. The cost of getting an echocardiogram was very expensive (900 dollars). The family had to pay upfront, or the children could not get the procedure. Therefore, the documented child was tested and the other two were not, because the family could not afford the echocardiograms for the two uninsured children.

Another social worker described a similar situation in which she consulted for a family with five children – three were born in the U.S. and two were not, so those two were uninsured. She described the thoughts of one of the undocumented children in the family "My sister has a privilege that I do not have," and noted that this creates a disparity within families.

VII. Charity Care Approval

Despite issues associated with obtaining charity care, interviewees described that families forget the process and are extremely happy once they are approved. Estimates from PRMO suggest that 85 percent of Duke's charity care applicants are approved; of that 85 percent, 90

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[20] "Mixed-status" families contain both citizen and undocumented members (Wallace et al., 2012). They usually contain U.S.-born children with illegal parents or illegal parents with both U.S.-born and foreign-born children in the same family.

percent are approved for 100 percent charity care that the hospital will write off. One care manager described that patients are ecstatic when charity care reduces their bills from 36,000-80,000 dollars to 600-700 dollars.[21] Patients whose bills charity care covered have sent PRMO thank you letters.

Many interviewees expressed favorable opinions of DUHS's charity care program. Interviewees reported an average level of contentment with the amount that families are receiving from Duke of 8.65 out of 10 (Table 4). All responses from interviewees who rated how they well they think the program is working said between seven and eight (Table 4). Overall, the average rating of families' financial assistance experiences was 7.15 out of 10 (Table 4). While participants acknowledged that DUHS can always improve, they reinforced that patients would struggle financially and health wise without the system. Three LATCH care managers described the program as "fantastic," "a good initiative," and "actually a good one…Duke doesn't hold back when patients are approved," respectively. The PRM and one social worker stated: "Being able to help somebody really says a lot about Duke, our reputation, and our willingness to reach out to folks who cannot afford the care they need;" and "It says something about our commitment to the community to be compassionate, to recognize that disparities exist, that healthcare should be available to everyone, and that charity will make that possible." The DUH administrator and one care manager were grateful that LATCH provides the uninsured with to access care at Duke.

Interviewees mentioned areas for improvement in the current charity care system. In summary, DUHS could streamline 1) communication, 2) program logistics, 3) education and 4) outreach.

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[21] The leftover bill is for services that charity care does not cover.

VII. Discussion, Conclusions, and Proposed Policy Response

i. Barriers to Care

These results suggest that language and patient mentality hinder Hispanics' access to care at DUH. Care mangers noted that patients struggle to process jargon and understand their financial assistance options in English: the language in which DUHS often publishes online information and promotional materials. If Durham's uninsured Hispanic families have little awareness of charity care because of language barriers, this might then prevent them from seeking care at DUH. Care managers noted that their undocumented Hispanic patients are also afraid to seek care at DUH, because they think they will be treated differently or denied care because of their inability to pay. These results are consistent with findings in the literature that the undocumented and uninsured have more difficulty accessing primary care and specialty care (Collins, Doty, Robertson & Garber, 2011; Hadley, 2007; Rhodes, Hiller, Stolz, & Hays, 2012; Simpson et.al, 2005), and that undocumented Hispanics are the group least likely to report having a usual source of care (Ortega et al., 2007; Rodriguez et al., 2009).

Perceived barriers to care may be associated with parents' high stress levels noted in this research. While interviewees asserted that DUH physicians are more concerned with patient health than their insurance status or ability to pay; families' perception of these as issues could negatively impact their motivation to seek care. The Hispanic community's word of mouth communication could perpetuate this mentality and promote stress for families who need emergent care. This research does not establish causality, but future research could investigate these potential relationships.

While DUHS raises awareness about charity care in the community, publicity efforts may not reach Durham's uninsured Hispanics. Though Hispanic community members more often

seek charity care from DUH, they do not comprise the majority of attendees at the Duke/Durham Annual Health Summit. Even if language was not an issue, they might not have Internet access; or as DUH staff noted, they do not know to look online for financial assistance information. The hospital would need to target Hispanics differently for them to become more informed. However, interviews suggested that Duke is not in the business of advertising free care.

Given the hospital's need to balance charity and community obligations, interviewees confirmed that it is not Duke's goal to mass disseminate charity care information to Durham's many uninsured Hispanics. While interviewees reported high patient contentment upon their approval for charity care (Table 4), DUH may not be interested in increasing its contribution beyond approximately 3.5 percent of its 2 billion dollar budget (Neff, Alexander, & Garloch, 2012).[22] Sharing more charity care details with admitted DUH patients than ED patients could help DUH avoid additional uncompensated care by discouraging ED visits. But even if the hospital is not interested in spending more on charity care, there may be better ways to keep people out of the ED.

ii. Education

Financial and preventative healthcare education in North Carolina's public schools might help reduce ED visits and subsequent consumption of charity care-funded services. Scholars suggest, "Financial education that is successful tends to be among people who understand well why it is important to them and to their future" (Shanks, Mandell, & Adams, 2013, p. 162). DUHS could apply the principles behind interactive financial literacy education to preventative health education. Perhaps teaching undocumented Hispanic students about why they need preventative health services could help promote healthcare responsibility. While training during

[22] Calculated based on DUHS 2012 charity care contribution of $69.00mm (Table 1).

high school has not improved long-term financial literacy, training might be more effective during pre-high school years before students have preconceived notions about financial behavior (Mandell & Klein, 2008).

DUHS funds four school based health centers in Durham Public Schools (Duke University Health System, 2013a). They intend to: address urgent health issues, facilitate access to primary care, and "preempt adverse health and educational outcomes including unnecessary use of the emergency room and student absences from school and missed parental work hours" (Duke University Health System, 2013a, p. 4-5). Having programs already in place makes this goal reasonably feasible.

Developing programs that emphasize the purpose of preventative health education and financial associated financial management might help address issues this paper raises surrounding Hispanic's utilization of healthcare services and subsequent need for charity care. If undocumented Hispanic youth could understand basic principles behind the U.S. healthcare and credit systems, and money management, they might hold themselves financially accountable for their healthcare more frequently. Similarly, teaching that preventative healthcare is cheaper and a better health choice could help youth distinguish between when delaying care is acceptable from when seeking care will prevent life threatening conditions. It could also inform long-term healthcare utilization.

iii. Charity Care Program Logistics

PRMO can make this goal even easier by accommodating the language preference and reading proficiency of the Durham-area Hispanic population. During an interview, a PRMO representative mentioned the goal to collect language preferences so that they can send Hispanic patients Spanish statements and Spanish charity care approval/denial letters. However PRMO is

designing a new Financial Hardship Form that simply re-formats the previous version. It will not request race, ethnicity, or preferred language. Doing so could help the hospital narrow the communication gap between patients and providers.

DUHS should clearly outline in the approval/denial letter which specific bills the hospital will cover, who patients should follow up with and when, what services charity care approval covers, and how long the charity care policy lasts. By clearly defining these steps in Spanish, low-literacy Hispanics could be less stressed and confused about paying for their healthcare. This way, DUH might also better inform patients that they will need to reapply when their coverage expires, unless the hospital adopts a preemptive charity care application model.

The hospital should consider adopting a proactive charity care application process, as one LATCH care manager suggested. The hospital administrator noted that she is lobbying for this and that DUH will likely adopt this policy in the future. A compromise between the current retroactive model and the care manager's proposed model is to allow families who have previously been approved and are at risk of policy expiration to apply for charity care before they receive their necessary additional services. Alternatively, the hospital could extend the policy for patients who are expecting procedures shortly after policy expiration rather than letting their coverage lapse and leaving them without bills that would make them eligible to reapply. Consider the case study that a LATCH care manager provided:

> A patient fell from the steps. She had surgery during which they extracted a part of her cranium. During the next two years, LATCH struggled to help her get the follow up operation. Once LATCH convinced the doctor to give her the surgery, the doctor called PRMO to confirm that her charity care plan would cover the procedure. The doctor cancelled the procedure because her charity care approval expired two days before the surgery was scheduled to take place. She needed to apply again for charity, but her balance was zero. She was back to square one.

The care manager did not know whether or not the patient ever received the surgery. A preemptive charity care application could be extremely useful for a family in the aforementioned scenario. This case study raises the question: Why do PADC and charity care policies expire before patients have received necessary services? While it is unrealistic to think that any hospital system will donate a lifetime of free care to the uninsured, perhaps it would be more appropriate to have a policy extension clause beyond the designated treatment window to accommodate patients in such extraordinary circumstances.

iv. Staff Communication and Coordination with LATCH

This research identified a need to improve communication between clinical providers at DUH; between PRMO, DUH staff and patients; and between DUH staff and LATCH care managers on a day-to-day basis. This could enable uninsured Hispanic patients' to have better experiences with charity care. It could make the patient routing, charity care application, and follow through processes more efficient.

The billing and collections team needs to coordinate better to avoid causing patients unnecessary stress. Billing should keep a running log of all of the applications in review or pending review. They could share this log with collections to ensure that they do not contact patients who are awaiting a response.

The hospital needs to educate staff on the proper communication pathways and about the importance of identifying care providers correctly. Across the clinical team, people need to be aware of which providers help patients with which steps of charity care, in order to help guide patients through the process. If all DHUS staff are better informed of the roles and responsibilities of the different departments that participate in charity care and of the details of the charity care program, then the hospital could properly direct patients to the right people

initially rather than routing most calls through social work. This would save time and resources and would make communication more efficient.

Staff must be able to distinguish between members of different departments in order to communicate effectively. The hospital should consider changing the PRM title to something less easily mistakable for PRMO. During the interview, the PRM mentioned that “care manager” is an alternative possibility, as it would improve consistency across branches of DUHS given that Duke Raleigh and Durham Regional Hospitals call their PRM staff care managers. But if DUH is going to work more closely with LATCH, whose employees are called care managers, then this change may perpetuate the problem.

LATCH may be able to help DUH employees improve their hand off of patients to the community. LATCH care managers connect with patients within 72 hours of an ED visit. A LATCH care provider on staff at DUH could make an immediate connection with patients, establish trust, better facilitate the transition back into the community, and ensure adequate follow up.

Perhaps the hospital could produce a brief educational video and an accompanying Fact Sheet that would: 1) outline the role of each staff member who has a hand in the charity care process, 2) explain how staff should communicate to properly route calls and answer questions, 3) define who to contact with what need, and 4) identify the financial assistance program’s goals and logistics. DUHS could distribute the video to all staff including the LATCH care managers and the Durham Community Health Network, which assists Durham’s low-income *insured* population, to improve communication between DUHS personnel and address issues identified in this research. This low cost solution would preserve DUHS’s viability and might offer long run cost savings.

These small-scale programmatic changes have national applicability, especially for states that are not participating in the Medicaid expansion. Charity care hospitals nationwide need to comply with the PPACA regulations and still serve their uninsured populations. These recommendations could help make their processes more efficient by conserving resources to help reconcile charitable hospitals' business and community obligations.

VIII. Limitations

There are a few limitations associated with this research. The small sample size of 16 interviews restricted the ability to perform substantive quantitative analysis on these data. Additionally, there were key members of the charity care process that are not included in this research, namely MAC and Financial Care Counselors. Those who were contacted did not demonstrate interest in participating. Four people declined to participate. 11 people did not respond to emails. One person was not available to meet anytime during the limited research time frame.

Examining these issues solely from the provider perspective gives a single-sided opinion of Duke's charity care experience. Patient interviews could reconcile this in the future. DUH's social work team did not approve patient interviews for this research. Despite these hurdles, this research might still be useful to other 501(c)(3) hospitals that are interested in streamlining their charity care processes. Other charitable hospitals face similar issues to those that Duke is confronting, so some of these solutions could be valuable.

IX. Acknowledgements

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X. Appendix

i. Figure 1

Duke Patient Revenue Management Organization (PRMO) Charity Sliding Scale						
	Percent of Poverty Guidelines	**200 percent**	**225 percent**	**250 percent**	**275 percent**	**300 percent**
	Discount Received	**100 percent Discount**	**90 percent Discount**	**80 percent Discount**	**70 percent Discount**	**65 percent Discount**
Family Size						
	1	$22,980.00	$25,852.50	$28,725.00	$31,597.50	$34,470.00
	2	$31,020.00	$34,897.50	$38,775.00	$42,652.50	$46,530.00
	3	$39,060.00	$43,942.50	$48,825.00	$53,707.50	$58,590.00
	4	$47,100.00	$52,987.50	$58,875.00	$64,762.50	$70,650.00
	5	$55,140.00	$62,032.50	$68,925.00	$75,817.50	$82,710.00
	6	$63,180.00	$71,077.50	$78,975.00	$86,872.50	$94,770.00
	7	$71,220.00	$80,122.50	$89,025.00	$97,927.50	$106,830.00
	8	$79,260.00	$89,167.50	$99,075.00	$108,982.50	$118,890.00
	9	$87,300.00	$98,212.50	$109,125.00	$120,037.50	$130,950.00
	10	$95,340.00	$107,257.50	$119,175.00	$131,092.50	$143,010.00

Table 5. (Duke University Health System, 2013b).

ii. Questionnaire: Local Access to Coordinated Healthcare Program Care Managers

Interviewee gender (circle one): M F

1. How long have you been working with the LATCH team?
2. What is your role in the LATCH program as a Care Manager?

Social Worker Community Health Worker Health Educator

3. What does this position entail?
4. How often do you meet with the same patients?
5. Are patient visits to LATCH on an annual or semi-annual basis, or are they need-based appointments?
6. What is your process for identifying LATCH patients, and how do you become connected with them?
7. How many patients do you work with at a given time?
8. Are the majority of your patients publicly insured, privately insured, other, or not insured?

Public Private Other Uninsured

9. What percent of your patients are referred from El Centro Hispano?
10. What percent of your patients are referred from Project Access?
11. Do the majority of your patients have children?

No Yes Unsure

12. What percent of the patients you work with are children?
13. To what extent do you think your patients know about financial assistance programs that Duke offers?
14. Do your patients ask you questions about Duke's financial assistance programs?

No Yes

   a. If yes, what do they ask about?
   b. If no, do you know if they ask someone else connected with the LATCH program?

15. In your opinion, on a scale of 1 to 10, how distressed do your patients seem by the financial burden associated with financing medical treatment costs for their children?

Not at all distressed Extremely Distressed

1 2 3 4 5 6 7 8 9 10

16. In your opinion, do your patients delay or postpone seeking care for financial reasons?

No Yes

17. What factors led you to make this assessment?
18. What can you tell me about Duke's charity care and Financial Assistance Programs?
19. To what extent are you aware of Duke's efforts to publicize their charity care initiatives to LATCH patients and the Durham community?
20. Do your patients seem to be aware of these initiatives?
21. Do you work with your patients to apply for charity care?
22. From your perspective, on a scale of 1 to 10, how well do you think the current system of charity care initiatives is working?

Poorly Very Well

1 2 3 4 5 6 7 8 9 10

23. What are your reasons behind selecting this number?
24. Does LATCH offer any kind of charity care initiatives specifically to patients?

No Yes

    a. If yes, what are they?
    b. If yes, how do you go about informing patients of these initiatives, or do you strictly refer patients to Duke University Hospital for this purpose?
25. What kind of obstacles do you face in helping to get patients the aid that they need?
26. Do you work with external providers to help patients meet their financial needs that Duke cannot or does not address?

No Yes

    a. If yes, which organizations do you work with?
27. To what extent does LATCH work with Duke to raise awareness in the community and inform patients of their aid options?
28. To what extent does LATCH publicize the Financial Assistance Program and charity care initiatives?
29. On a scale of 1 to 10, how content do you think your patients are with their financial assistance experiences (applying for aid, receiving aid, etc.)?

Very Unhappy Extremely Content
1 2 3 4 5 6 7 8 9 10

30. What kinds of documentation do patients have to present in order to get financial assistance for their treatment?
31. How long do patients have to present necessary documentation to get financial assistance for their treatment?
32. What if the patients do not have this documentation?
33. Under what circumstances do your patients get denied donated or charity care aid?
34. What do families usually do if they are not approved?
35. Do you know if any of your patients have been treated at Duke before?
36. If yes, did they participate in a charity care or Financial Assistance Program?
37. If yes, to your knowledge, how did these patients find out about them?
38. Do you know anything about what their experiences were like?

iii. Questionnaire: Duke University Hospital – Patient Revenue Management Organization

Interviewee gender (circle one): M F

1. How long have you been with the Patient Revenue Management Team?

Data Questions:

2. What percent of hospital patients receive charity care or some kind of financial assistance?
    a. Of those patients, how many are children?
3. What is the average amount that charity care covers per patient? Per child?
4. What percent of DUH charity care patients are from:
    a. LATCH Referrals
    b. PADC Referrals
    c. Other
5. What patient population most often accesses charity care funding?
    a. What percent of charity care patients are parents of undocumented Hispanic children?

Additional Questions:

6. What is the process that financial assistance counselors take patients through in order to get them charity care?

7. To what extent does your team work with LATCH to help patients get the financial assistance they need?
8. To what extent do you think your patients know about the charity care program that Duke offers?
9. Under what circumstances do the financial assistance counselors offer uninsured patients information about Duke's charity care program?
    a. At what point during their course of treatment do they usually open this conversation?
10. How long does it take to review completed charity care applications after patients have applied?
11. How often and under what circumstances do patients intentionally misreport financial information on their charity care application?
    a. How does this impact their eligibility for financial aid?
12. Under what circumstances do your patients get denied charity care to finance their treatment costs?
    a. What do families usually do if they are not approved?
13. Have you ever considered sending the approval letter in Spanish?
14. Do you have any plans to update the Financial Hardship application to consider other living expenses and patient circumstances? Why or why not?
15. Have you ever considered asking any other questions on the financial hardship form?
16. Are there areas of improvement that you are focusing on for the current charity care process in general?
    a. Have you ever considered a system that approves patients for charity care before patients undergo procedures rather than after they have bills in hand?
17. What concerns do patients most often express when they call PRMO customer service?
18. In your opinion, on a scale of 1 to 10, how happy are your patients with the amount of financial aid they are receiving from Duke?

Least Happy Most happy

1 2 3 4 5 6 7 8 9 10

19. In your opinion, do you feel that the amount of financial assistance Duke gives charity care patients is often sufficient to address the financial burden associated with a child's cost of care?

No Yes

20. From your perspective, on a scale of 1 to 10, how well do you think the current system of charity care initiatives is working?

Poorly Very Well

1 2 3 4 5 6 7 8 9 10

21. What are your reasons behind selecting this number?
22. On a scale of 1-10, how would you rate the financial assistance experiences of your uninsured patients overall (applying for aid, receiving aid, etc.)?

Very Negative Very Positive

1 2 3 4 5 6 7 8 9 10

23. How do patients react to the financial assistance counselors?
24. How do you see Duke's responsibility to the Durham community?
25. How do you reconcile the hospital's need to function as a business with the hospital's nonprofit obligation to the Durham community?

26. How has your team adapted to the Affordable Care Act regulations, which mandate that 501(c)(3) hospitals raise awareness of charity care opportunities in the community?

iv. Questionnaire: Duke University Hospital Social Workers

Interviewee gender (circle one): M F

1. How long have you been working as a social worker at DUH?
2. What patient population do you cover?
3. In your opinion, on a scale of 1 to 10, how distressed do your uninsured patients' parents seem by the financial burden associated with financing their children's medical treatment costs?

Not at all distressed Extremely Distressed

1 2 3 4 5 6 7 8 9 10

4. What is the hospital's process for identifying prospective charity care patients?
5. To what extent do you think your patients know about the financial assistance and charity care programs that Duke offers?
6. Do your patients ask you questions about Duke's charity care or financial assistance programs?

No Yes

   a. If yes, what do they ask about?
   b. If yes, to your knowledge, how did these uninsured patients find out about Duke's charity care program?
   c. If no, do you know if they ask someone else connected with their Duke treatment team?
7. Under what circumstances do you offer your uninsured patients information about Duke's charity care program?
   a. At what point during their course of treatment do you usually open this conversation?
8. What is your opinion of Duke's charity care program?
9. To what extent are you aware of Duke's efforts to publicize their charity care initiatives to uninsured patients and the Durham community?
10. To what extent are you aware of LATCH's efforts to help uninsured patients get the financial assistance and treatment that they need?
11. What considerations must you take into account when providing uninsured patients with the care that they need?
12. In your opinion, on a scale of 1 to 10, how happy are your patients with the amount of financial aid they are receiving from Duke?

Least Happy Most happy

1 2 3 4 5 6 7 8 9 10

13. In your opinion, do you feel that the amount of financial assistance Duke gives charity care patients is often sufficient to address the financial burden associated with a child's cost of care?

    No Yes

14. What kind of obstacles do you face in getting patients the financial aid that they need?
15. Under what circumstances do your patients get denied charity care to finance their treatment costs?
16. What do families usually do if they are not approved?

17. From your perspective, on a scale of 1 to 10, how well do you think the current system of charity care initiatives is working?

Poorly Very Well
1 2 3 4 5 6 7 8 9 10

18. What are your reasons behind selecting this number?
19. In your opinion, do your uninsured patients delay or postpone seeking care for financial reasons?

No Yes

20. What factors led you to make this assessment?
21. On a scale of 1-10, how would you rate the financial assistance experiences of your uninsured patients overall (applying for aid, receiving aid, etc.)?

Very Negative Very Positive
1 2 3 4 5 6 7 8 9 10

v. Questionnaire: Duke University Hospital Patient Resource Managers

Interviewee gender (circle one): M F

1. How long have you been working as a PRM at DUH?
2. What patient populations do you cover and what is your role?
3. In your opinion, on a scale of 1 to 10, how distressed do your uninsured patients' parents seem by the financial burden associated with financing their children's medical treatment costs?

Not at all distressed Extremely Distressed
1 2 3 4 5 6 7 8 9 10

Reasons:

4. What is your team's process for identifying prospective charity care patients?
5. To what extent do you think your uninsured Hispanic patients' parents know about the financial assistance and charity care programs that Duke offers?
6. Do your undocumented patients' parents ask you questions about Duke's or financial assistance programs when they are seeking treatment for their children?

No Yes

   a. If yes, what do they ask about?
   b. If yes, to your knowledge, how did these uninsured patients find out about Duke's charity care program?
   c. If no, do you know if they ask someone else connected with their Duke treatment team?
7. Under what circumstances do you offer your undocumented/uninsured patient families information about Duke's charity care program?
   a. At what point during their course of treatment do you usually open this conversation?
8. How do you feel about the communication among DUHS staff about patients' charity care?
9. To what extent does your team interact with Financial Care Counselors and PRMO?
   a. How often do you work with PRMO and in what capacity?
   b. To your knowledge, are DUHS staff aware of the difference between PRM and PRMO?

10. What is your opinion of Duke's charity care program?
11. To what extent are you aware of Duke's efforts to publicize their charity care initiatives to uninsured patients and the Durham community?
12. To what extent does LATCH help uninsured/undocumented patients get the financial assistance and treatment that they need?
13. Do you work with LATCH to facilitate care management for the uninsured, undocumented, low-income Hispanic families?
14. What considerations must you take into account when providing undocumented children with the care that they need?
15. In your opinion, on a scale of 1 to 10, how happy are your patients with the amount of financial aid they are receiving from Duke?

Least Happy ... Most happy

1 2 3 4 5 6 7 8 9 10

Reasons:

16. In your opinion, do you feel that the amount of financial assistance Duke gives charity care patients is often sufficient to address the financial burden associated with a child's cost of care?

No Yes

Reasons:

17. What kind of obstacles do you face in getting undocumented/uninsured children the financial aid that they need?
18. Under what circumstances do these patients get denied charity care to finance their treatment costs?
19. What do these families usually do if they are not approved?
20. What happens to patients if charity care coverage expires before they receive necessary treatments?
21. What concerns do undocumented, uninsured patients present during the discharge conversation?
22. What kinds of follow up do you have with uninsured Hispanic charity care patients?
23. How often do these people stick to the treatment plans that you provide them?
24. From your perspective, on a scale of 1 to 10, how well do you think the current system of charity care initiatives is working?

Poorly ... Very Well

1 2 3 4 5 6 7 8 9 10

25. What are your reasons behind selecting this number?
26. In your opinion, do your uninsured patients delay or postpone seeking care for financial reasons?

No Yes

27. What factors led you to make this assessment?
28. On a scale of 1-10, how would you rate the financial assistance experiences of your uninsured patients overall (applying for aid, receiving aid, etc.)?

Very Negative ... Very Positive

1 2 3 4 5 6 7 8 9 10

29. What do you think DUHS could do differently to help improve the charity care experiences of the uninsured?

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