The North Carolina Way: emerging healthcare system and faith community partnerships

This is an Accepted Manuscript of an article published by Taylor & Francis in Development in Practice on 21 Jul 2017, final version available online:
http://www.tandfonline.com/http://dx.doi.org/10.1080/09614524.2017.1328043.

Teresa Cutts & Gary Gunderson (2017). The North Carolina Way: emerging healthcare system and faith community partnership. Development in Practice, 27: 5, 719-732.

By Teresa Cutts and Gary Gunderson

Abstract:
United States healthcare policy has promoted the development of healthcare systems and community partnerships designed to decrease costs and readmissions, particularly for under-served populations. Typically, these partnerships are 'hospital-centric,' focused on following in-house clinical costs into the community. Two contrasting large-scale community system models show results from development practices, integrating faith community partnerships that affect healthcare utilisation. This 'community to hospital' focus is key to several such initiatives in the US. This article describes local implementation efforts in North Carolina, also known as 'The North Carolina Way' – and tests assumptions on implementation practices for creating robust faith-community and healthcare partnerships.

Key Words: charity care, community engagement, faith-community partnerships, health systems, readmissions, super-utilisers, trust

Introduction

Many United States (US) healthcare systems[1] are attempting to build partnerships with communities as one way to engage with local partners for sustainability, which has gained impetus under the Affordable Care Act[2] (ACA, see Cutts and Cochrane, 2016). Hospitals, following recent global public health thinking on social determinants (Marmot et al. 2012), are now more deeply invested in building partnerships outside their walls and clinical services. While the world of public health usually understands the social determinants of health to be factors in the complex dynamics of prevention, long term resilience and social networks - hospitals in the US have tended to focus on the relatively short-term role of social factors affecting timing of access to health services, compliance to medical instructions and to recovery, as well as closely linked behavioural issues needing social support (Ashe et al, 2016). All these factors have clear relevance to the cost of an episode of care (which is how the business model of US healthcare thinks of cost).

The ACA was built on the assumption that moving from a short-term transactional business model to a longer-term view of the control and prevention of medical conditions, would put the 'affordable' in the name of the policy (Barnett, Cutts and Moseley, 2016). While the policy is likely to be renamed, this fundamental logic around how to make US healthcare more affordable will

continue and likely become even more urgent. Community engagement will continue to be a high priority in terms of policies designed to decrease reimbursement for readmissions and care for indigent persons, particularly those seen in emergency departments (Stine, Chokshi, and Gourevitch 2013). Thus, no matter how the federal policy shifts in terms of insurance coverage, there will be a high priority on community engagement efforts, continuing the momentum since the late-2000's (Health System Learning Group 2013), with more healthcare systems moving outside their walls to partner with non-traditional stakeholders (Gunderson and Cochrane 2012) and considering novel means of reinvesting in community (Norris and Howard 2016). Many of the US population health management initiatives (such as the Institute for Healthcare Improvement's 100 Million Lives, or The Democracy Collaboration) focus on such partnerships, which often entail healthcare systems building more equitable and longer-term community partnerships (Cutts and Cochrane 2016). For example, the authors serve as part of the Secretariat of *Stakeholder Health*, a learning collaborative established in 2011, seeking to improve care for vulnerable populations by developing partnerships within local healthcare systems (Cutts et al. 2016).

In the US context, faith networks play a distinctive and visible role in the social ecology of community systems (Putnam and Campbell 2010). In the US, religious participation, even at relatively low levels of attendance at worship, shows relevance to the functioning of community systems – pertaining not only to congregational scale, but also to lives of those living around the worshipping community (Putnam and Campbell 2010). Those seeking to develop community systems (to achieve more optimum aggregate outcomes as measured by health or other metrics), commonly seek to include faith networks as a functional part of their community strategy. Hospitals tend to think of 'community' as the place where patients live in-between episodes of expensive care – and hospital administrators usually do not think of themselves as agents of community development. However, the increased awareness of the social determinants of the *cost* of health are reluctantly turning US hospitals toward community 'systems thinking' (see De Savigny and Adam 2009).

More specifically, faith community and healthcare system partnerships have become more popular in the last decade – in some ways returning to origins since most healthcare systems in the US were established by faith-based entities in the past two centuries (Winslow et al. 2016). Health education and other public health interventions based in faith-community settings have become a common partnership model in the US (Campbell et al. 2007; Koenig, King and Carson 2012). Recently, partnerships with healthcare systems, in which faith-community partners are prominent stakeholders in improving community health, have proliferated (Gunderson and Cochrane 2012). However, while it is acknowledged that faith-community partnerships with healthcare systems are prominent in the US, few have been able to show the effects of these partnerships or true return on investment through viable metrics (Barnett, Cutts, and Moseley, 2016).

This article reports on the growth of a state-wide clinical faith-community partnership network in North Carolina which built on experiences from an earlier partnership intervention in Memphis (Tennessee). The partnership in North Carolina has built a web of partnerships with over 300 congregations and eight early adopter healthcare systems (including Wake Forest Baptist Medical Center or WFBMC) who, since 2012, have embraced faith-based partnerships. This network is called 'The North Carolina Way', and it is envisioned as a development practice model.

Healthcare organisations usually understand 'community' as the place where their patients live or the venue in which their public health activities take place. This is, of course, a very simple understanding of the dynamic complex human systems called 'community'. A well-functioning human community would be one in which people could express their capacities for optimal personal, family, social, organisational and political life, marked by mercy, justice, compassion and the fruits of human decency (Karpf et al. 2008). This sense of community is envisioned within Hebrew and Islamic traditions as Shalom or Salaam, known in the African language of Sesotho as 'bophelo' (Germond and Cochrane 2010). It would also be an optimal place to run a hospital under the

Affordable Care Act, which tilts reimbursements toward lower, less expensive levels of care and prevention, while away from costly medical treatment. The optimal community system would require dramatically less medical care - only that required by 'decency' and only when medically driven, not as now, as a result of pathologically social and political phenomenon. Community development (or community system strengthening) is then one of several optimal prevention and cost containment strategies (Barnett et al., 2016).

Our aim is to describe the two models of community engagement (Memphis and NC), lessons learned from the implementation and adaptation process from one site to the next, as well as to share proxy measures of impact and success as it relates to healthcare system indigent or 'charity care' metrics.[3] This work shares briefly the specifics of the earlier Memphis-based CHN model and health services impact, then more details on The North Carolina Way, an adaptation that is state-wide, versus the urban-based CHN. Necessary components for building robust partnerships then are articulated and shared for each site. Lastly, we offer early process and impact metrics in NC as they relate to charity care trends in the areas where the community engagement, partnerships and caregiving efforts have been focused most strongly.

Methods

This case study identifies components of building robust partnerships between healthcare systems and congregations, learned from both the work in Memphis and North Carolina. Several different studies were integrated with personal experience and observations (both authors working having worked in both healthcare systems being described here) for the purposes of this article. Thematic analysis was conducted – focusing on the following areas: trust in leadership inside the hospital and in the community/congregational settings; healthcare systems resourcing the emerging partnership efforts; aligning, leveraging and mobilising community assets with 'fresh eyes' through some form of mapping (Cutts et al. 2016); as well as adopting a humble stance with regard to community, what we call being a 'teachable hospital' vs. just a 'teaching hospital' (Gunderson et al. 2015). Additionally, each site identified its 'tipping point' (Gladwell 2000) or the event (and its timing) that allowed their work to begin to spread, grow and flourish, as well as the level of extramural funding (i.e., monies not from in-house healthcare system funding, but outside sources) obtained.

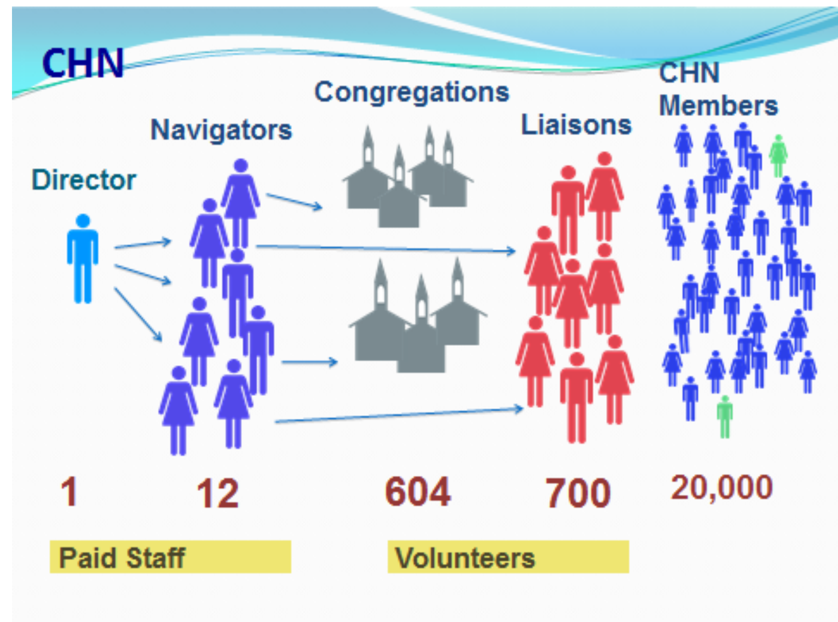
Evaluation research and qualitative data captured from the eight healthcare systems in terms of community engagement and partnerships (research conducted from 2012-2016), in conjunction with local Fellows and healthcare staff. In-house WFBMC healthcare system researchers (including TC) conducted annual quantitative evaluation of the Forsyth County zip code level charity care trend metrics (shared below).

Two cases: the Congregational Health Network and the North Carolina Way

The Congregational Health Network, Memphis TN

The Congregational Health Network (CHN, also sometimes called 'The Memphis Model') is a partnership between the Methodist Le Bonheur Healthcare system (a 1.5 billion USD, seven-hospital healthcare system) and 604 congregations, located in the concentrated urban poverty and disparity hub of Memphis, TN. In the CHN, clergy and other church representatives play an equal role with hospital staff, promoting better health by serving as role models, helping individuals adopt healthier lifestyles, encouraging use of community-based programs, and serving as a link between congregants and the health care system (Gunderson and Cochrane 2012). Led by Rev. Dr. Bobby Baker, Congregational Health Network elements also include community-based design, partnering, participatory data analysis, evaluation and ongoing program development (Agency for Healthcare Research and Quality 2014). Figure 1 depicts the CHN structure.

Figure 1. the Congregational Health Network (CHN, also known as the 'Memphis Model').



Over 20,000 enrolled congregants are flagged by the healthcare system's electronic medical record whenever admitted to the hospital. A hospital-employed 'navigator' visits the patient to determine patient social and spiritual (non-medical) needs and then works with a church liaison to arrange post-discharge services and facilitate transition. Additionally, the CHN has trained over 4,000 congregational and community laypeople through 14-hour capacity development workshops designed to improve the ability of community caregiving (Cutts et al. 2016).

Congregational Health Network members cared for by the CHN for the first 25 months had aggregate total charges that were US$4 million *less* than those of non-CHN members matched on age, sex, race and diagnostic related groups (90% of these patients were also affiliated with churches that were not part of the network, see Cutts 2011). More rigorous predictive modelling of the data archived in the electronic medical record showed that CHN members' time to readmission for all diagnoses was significantly longer than that of matched controls and that their gross mortality levels were roughly half of non-CHN patients, from 2007-2011 (Barnes et al. 2014). Stine et al. (2013) promoted the CHN as a best practice model for under-served settings with a majority African-American population. The CHN experience have been studied by governmental organisations, including the Department of Health and Human Services (Health System Learning Group 2013) and Agency for Healthcare Research and Quality (AHRQ 2014).

The North Carolina Way, NC

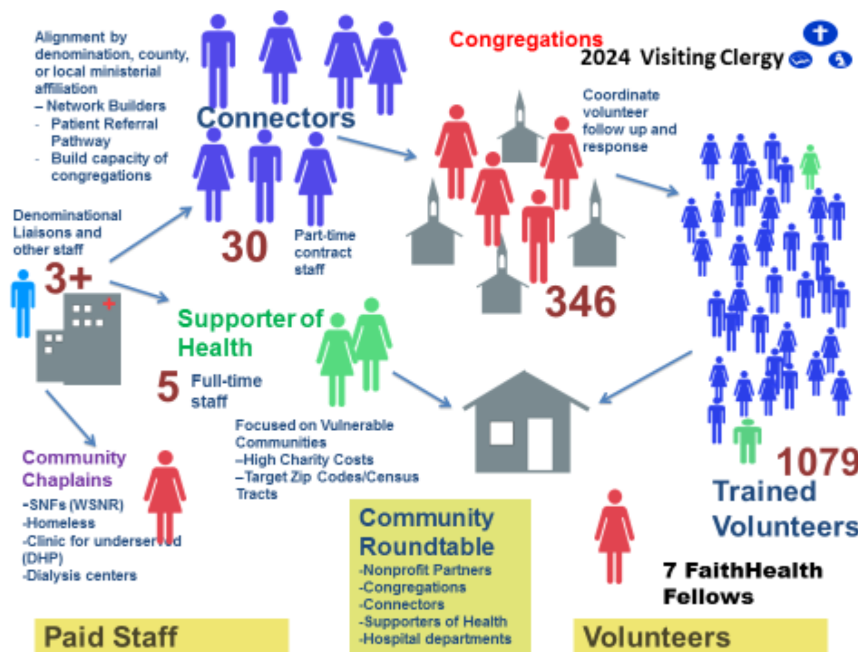
North Carolina, like the country as a whole, has suffered immense losses of manufacturing industries (namely textile, furniture and tobacco) between 1980 and 2005, with a 43.5% loss in manufacturing jobs documented more recently between 2000 and 2010 (Bureau of Labor Statistics, 2012). These job losses have decimated the local economy, especially in smaller, rural NC towns, which represent the majority of municipalities. Many persons with high school degrees or less, who had been guaranteed lifetime employment through such industries, were rendered unemployed with no skill sets upon which to draw for other types of employment. Many speculate that this economic downturn has led to increased incidences of alcohol and drug poisonings, deaths from liver disease and suicides, which has been termed 'dying from despair' (Khazan, 2015). This trend has been documented nationwide in the US as lower-educated white populations have demonstrated increased morbidity and mortality in their mid-fifties or even late 40's, a new development for that cohort, but a trend that has been common for decades in populations of color (Case and Deaton, 2015).

In 2012, Wake Forest Baptist Medical Center (WFBMC) sought to bring the Memphis CHN to the state, and the growing partnership process is now known as 'The North Carolina Way'. Drawn by the logic of 'proactive mercy' toward the poor, versus the usual 'reactive charity' strategies of healthcare systems (Gunderson, Cutts, and Cochrane 2015), the WFBMC Board committed the funds

of an internal foundation to the process accountable to three indicators: growing congregational and community partnerships, that charity care or self-pay costs for the indigent would increase in 2013 (due to persons testing expanded access) and then decrease annually, and that the model would gain peer endorsement.

The North Carolina Way network growth has been slower in speed and scale than that of Memphis, but, to date, there are 346 congregational partners spanning 25 NC counties (and one in Virginia). These partnerships include some of the local congregational partnerships in other counties (described below), which often have local branding and specific local leadership. For example, the Randolph County partnership is called 'Randolph FaithHealth'. The North Carolina network is marked by a more distributed and localised model than the CHN, especially in certain rural counties. Figure 2 provides a visual of the North Carolina Way structure, with WFBMC at its center.

Figure 2. The North Carolina Way



The North Carolina Way includes seven 'Fellows' and 30 'Connectors'. The network is also comprised of three 'Liaisons' (representing the General Baptist Convention of 2,000 congregations, the North Carolina Baptist State Convention of 3,600 congregations and the Cooperative Baptist Convention, with 400 congregations, totalling roughly 6,000 congregations in those networks), 2024 visiting (volunteer) clergy and 1079 trained lay volunteers (348 unique).

'FaithHealth Fellows' are a collaborative learning cohort from across NC who have been trained to be leaders in the theory and practice of integrating health systems and community efforts, most recently through a Kate B. Reynolds (KBR) Charitable Trust grant. They are paid for serving as faculty for the cohorts of Fellows trained, which started in January 2017. Thirty 'Connectors' across 25 counties (who are locally embedded in given geographical areas and/or other denominational networks, like the Moravian Church) triage volunteers, provide direct caregiving, train lay persons and build capacity across networks. They are funded by a Kate B. Reynolds Endowed Trust (KBR) grant, as well as the Wake Forest Baptist Foundation, most working 10 hours per week for a monthly stipend of US$500. Three 'Liaisons' are full-time paid staff representing the three denominational structures mentioned above. Lastly, pivotal to the local WFBMC / Forsyth county model is five full-time staff, the 'Supporters of Health', who work primarily in the most under-served neighbourhoods in Forsyth County and have shown significant return on investment in their first six months' efforts (Barnett, Cutts, and Moseley 2016).

The remainder of this article describes early efforts of WFBMC (as the umbrella institution) with seven other health systems to build out their local version of the North Carolina Way, articulating the achievement of necessary components (shared immediately above) for each site.

Healthcare systems reaching out to build congregational partnerships

Wake Forest Baptist Medical Center (Winston Salem)

Wake Forest Baptist Medical Center has 1,104 beds and is a critical tertiary care center, with a catchment area of 19 NC counties (plus five counties in Virginia). Its only major competitor in the county is Forsyth Hospital (Novant Healthcare), as the two hospitals share the local market. Its payer mix in 2012 (when these community partnership efforts began) was 42% Medicare, 29% Managed Care/Third Party Payers, 17% Medicaid and 7% personal pay (WFBMC Finance Dept. In-House reporting, 2013).

In 2012, approximately US$1 million was allocated to fund the FaithHealth efforts from the WFBMC Foundation (or what the then Chief Financial Officer estimated to be 5% of the total of self-pay charges in the financial year 2012). Since 2013, these monies have been reallocated to fund the following: a new Director of Community Engagement, five Supporters of Health (former environmental service workers who now work as hybrid community health workers and care 'triagers'), a percentage of time for an embedded evaluator/program developer, as well as to cover costs of 12 local Forsyth county Connectors and the General Baptist Convention Liaison. It is well known that there are low trust level between the WFBMC and populations of colour and the under-served - given that it ran the decades-long Eugenics program and closed the Kate Bitting Reynolds hospital in the predominantly African-American section of the county in 1970 (Grimes 1972; Begos et al. 2012). Twelve Community Health Assets Mapping Partnership (CHAMP) Access to Care workshops have been held in Forsyth county, including four for Hispanic populations in July 2014 (Cutts et al. 2016), two devoted to food pathways in June-July 2015, and two focused on behavioural health in April 2016. Grants from KBR, The Duke Endowment (TDE) and Northwest Area Health Education Center (NW AHEC) also supported parts of the work described below since 2013.

Additional healthcare systems

Descriptions of the other seven systems' settings are summarised in Table 1.

Table 1. Specifications of healthcare systems, county demographics and faith data.

	Appalachian Regional Healthcare System	**Carolinas Healthcare System, Blue Ridge**	**CaroMont Health**	**McDowell Hospital**	**Randolph Hospital**	**Southeastern Regional Medical Center**	**Wilkes Regional Medical Center**
Number of Beds	117	315	435	65	145	452	130
Level of Care	General Medical and Surgical	Community Teaching	Tertiary	General Medical and Surgical	General Medical and Surgical	Tertiary	General Medical and Surgical
Payer Mix-2014	Medicare: 52%, Medicaid: 10% Self-Pay: 8% 3rd Party: 27%	Medicare: 50.8%, Medicaid: 20.2% Self-Pay: 10% 3rd Party: 19%	Medicare:28% Medicaid: 15% Self-Pay: 8% 3rd Party: 49%	Medicare: 45.1% Medicaid: 20.1% Self-Pay: 9.7% 3rd Party:22.4%	Medicare: 27.2% Medicaid:16.3% Self-Pay:13.4% 3rd Party: 16.5%	Medicare: 34.8%, Medicaid: 31.1% Self-Pay: 7.6% 3rd Party: 15.5%	Medicare: 23%, Medicaid: 29.5% Self-Pay: 18% 3rd Party: 20.9%
Estimated Amount of Self-Pay in 2014 ($)	$27,223,646	$30,478,219	$43,610,729	$12,815,198	$6,761,617	$61,065,370	$3,137,487*
# Competing Health Systems in Catchment Area	4 (3 in NC, 1 in TN)	4	2	4	3	0	1
Population by county	51,871	90,505	208,049	44,998	142,466	135,496	69,306
% Rural	55%	43%	20%	70%	56%	63%	73%
# of Total Congregations in County	94	202	393	107	269	316	146
Number Partner Congregations	11	15	30	28	17	15	24
% Penetration	12%	7%	8%	26%	6%	5%	16%

of Partner Congregations							
% Unchurched	58.4%	39.2%	42.5%	57.1%	64.5%	55.3%	42.2%

*Latest available figure (2013)

All sites have at least one part-time Connector, paid for by the KBR grant, pipelined through WFBMC and all but two (Appalachian Regional Healthcare System and McDowell Hospital) received TDE grant funds for local community engagement and evaluation efforts from 2014-2016.

Appalachian Regional Healthcare System (ARHS) (Boone)

Appalachian Regional Healthcare System (ARHS)' network, called 'AppFaithHealth' is led by efforts of Chaplain Melanie Childress and began in September 2014, with 11 partner congregations. AppFaithHealth staff identify needs and match congregations with neighbours who are high utilisers of healthcare resources, with little personal resources to assist. AppFaithHealth's focus is on developing relationships, creating healthier communities, and including congregations as a resource for patients who are being discharged. Health Assets Mapping was conducted in September 2015 and 12 congregational volunteers have been trained. AppFaithHealth tracking was integrated into the electronic medical record on April 12, 2016. One staff is paid for by the system to aid in FaithHealth efforts and US$3,000 of extramural funding was obtained. The 'tipping point' in Watauga County was an August 2015 clergy luncheon, that launched stronger relationships between the health system and the faith community. Trust in the system is rated as low in this community.

Carolinas Healthcare, Blue Ridge (Morganton)

Carolinas Healthcare, Blue Ridge is a community teaching hospital and their FaithHealth efforts began in November 2014, when Gunderson served as a keynote speaker at an event focusing on end-of-life issues for both clergy and health providers. FaithHealth in Burke County is led by a Chaplain Dennis Stamper and their system's target population has been patients who are readmitted more frequently. The WFBMC KBR grant funded a chaplain resident, who is Hispanic, bilingual and a former community organiser, starting in October 2015, and has been helpful in engaging that population in Burke County. Working closely with The Foundation of Burke County and efforts around community mapping (July 2015), as well as the KBR Healthy Places initiative, the work has now grown to engage 15 congregations (two of whom are Hispanic) and 10 volunteers. The focus area for the hospital is improving Transitions in Care, and FaithHealth is working closely with those efforts, to decrease readmissions and charity care costs. Two staff are covered by the system and dedicated to FaithHealth, and US$57,000 was obtained for extramural funding. A tipping point was thought to be in October 2015 when funding was obtained for a Connector and a chaplain resident to spread the work to the larger community, particularly among the Hispanic/Latino population. Trust in the system is rated as average in this local community.

CaroMont Health (Gastonia)

CaroMont Health's FaithHealth Gaston efforts started in February 2014, when Lisa Marisiddaiah (then working as the Gastonia Parish nurse) was recruited by CaroMont and later hired as the manager of Faith Health in June 2014. A design team was convened in August 2014. FaithHealth Gaston's target population is the frail elderly and has engaged 30 congregations and over 100 volunteers. They are working closely with in-house Case Management to determine patient needs and align these needs with community volunteers. Asset mapping was conducted in November 2014.

The programme has arranged training for 20 faith community nurses through grants received from the CaroMont Health Foundation. Two staff are covered by the healthcare system and dedicated to FaithHealth, and US$94,000 of extramural funding was obtained. The tipping point was judged to be January 2015, when Lisa presented the concept of FaithHealth Gaston to the senior leadership team, asked for funding for another position to help with coordination of volunteers and

other projects and that request was approved. Trust in the health system is rated as average by the local community.

McDowell Hospital (Marion)

McDowell Hospital's FaithHealth efforts were begun by Volunteer Coordinator Phillip Long in April 2013 and their network has grown to 28 congregations (top number of 26% penetration of all county congregations) and 21 volunteers. Asset mapping was conducted in May 2014 and target populations include readmissions, super-utilisers, and those with transportation needs. Hands-on caregiving efforts have been impressive. McDowell county Connectors met 543 caregiving needs from April 2015 to April 2016, with 21 volunteers offering 263 hours of service, working in conjunction with the Community Care Paramedic team. One staff has been covered by the healthcare system and is dedicated to FaithHealth, and US$21,000 of extramural funding has been obtained. The tipping point was the hiring of the first Connector in March 2015. Trust in the system is rated as high.

Randolph Hospital (Asheboro)

Randolph Hospital (Asheboro) work in Randolph County, called Randolph FaithHealth began in November 2013, under the leadership of Chaplain Barry Morris and a Fellow, Helen Milleson (currently the Randolph FaithHealth Navigator). Community health asset mapping (CHAMP) was conducted in November 2014 and they have trained a total of 42 volunteers to date, with 17 partner congregations. The Randolph Hospital target population has been super-utilisers (defined as those who return to the hospital more than once per month). One staff is covered by the healthcare system and is dedicated to FaithHealth, and US$33,000 has been obtained for extramural funding. The tipping point was when mapping workshops were conducted in November 2014. Trust in the system is rated as average.

Southeastern Regional Medical Center or SMRC (Lumberton)

Southeastern Regional Medical Center (SRMC)'s FaithHealth efforts in Robeson County, called 'Compassion For U Congregational Wellness Network', started in September 2012, led by Chaplain Dean Carter. These efforts were built on Palliative Care Services (developed to obtain cost avoidance for futile care) which started in 2011. Building on the tenets of CHN model outlined above, Carter and his team were awarded the nation's first faith-based Health Services Research Administration (HRSA) grant in Oct. 2014. Community resource surveillance (a type of non-participatory mapping) was conducted in summer 2014. The network includes 15 congregations, 35 volunteers and the group is intentionally collaborating with many public health and higher education partners. Their focus is improving community wellness through healthy lifestyle change by connecting churches with local agency wellness outreach. One and a half staff salaries are covered by the healthcare system and dedicated to FaithHealth, and US$106,000 of extramural funding has been obtained. The tipping point occurred when Gunderson spoke to the leaders at Southeastern Health in June 2013. The model includes transitional care nurses, and trust in the system is rated as low.

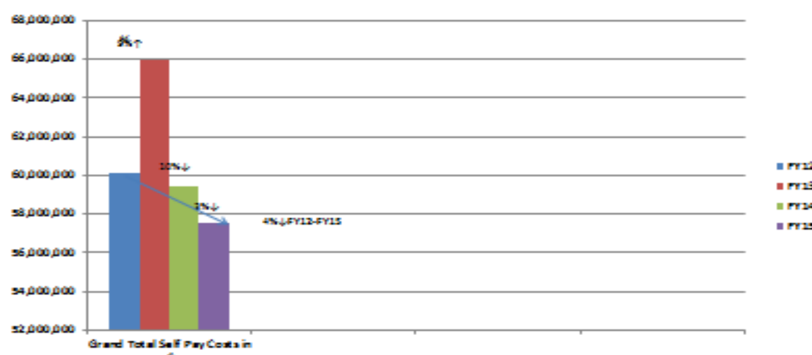
Wilkes Regional Medical Center (North Wilkesboro)

Wilkes Regional Medical Center (WRMC), FaithHealth efforts in Wilkes County started in August 2013, when asset mapping was conducted, as the first NC site. Early Wilkes County efforts were led by a local pastor/Connector, with funding through the Wilkes Health Foundation to subsidise community resources for the under-served and those being discharged and focused primarily on capacity building. Current KBR-funded Connector efforts include less capacity building and more hands-on caregiving, particularly in regards to preventing readmissions to WRMC. FaithHealth efforts are now led by Renee Rutherford (FaithHealth and Readmissions Coordinator) who was hired in January 2016 through joint funding from the Wilkes Health Foundation and WRMC. They have engaged 36 congregations and 73 volunteers. Half a staff post is covered by the healthcare system

and dedicated to FaithHealth, and US$80,000 extramural funding has been obtained. Rutherford's hiring also marks the tipping point for the work when WRMC committed money (0.5 FTE) and space inside the walls of the hospital for the FaithHealth work. Trust in the health system is rated as low.

Results (for the WFBMC Forsyth County implementation area)
Wake Forest Baptist Medical Centre's 2012 baseline estimated aggregate charity care spending was US$60,073,940 (self-pay figures only, not including uncollected co-pays or other bad debt), with roughly 30% of self-pay patients accounting for those costs being concentrated in five under-served zip codes in Forsyth county (27101,27103,27105,27107,27127 – see Barnett, Moseley, and Cutts 2016). Charity care figures trended as predicted based on experiences of the Memphis model – that is, due to expanded access, there was an increase in charity care in the second year. From baseline financial data in year 2012, there was a 9% increase in financial year 2013, then a downward trend from financial year 2014 (16% decrease from baseline) and financial year 2015 (4% decrease from baseline), representing a decrease of US$2,508,460 (WFBMC Annual Financial Reporting, 2012-2015). See Figure 3 for exact aggregate self-pay dollars for the four-year timeline.

Figure 3. WFBMC aggregate charity care from 2012-2015.



Congregational partnership growth in Forsyth county alone has been steady, with 89 partners, representing 20% penetration of the total congregations (our target for each county) and 39 volunteers. Forsyth county is primarily urban (only 7% rural) and less than half of its residents are unchurched (45.7%). Extramural funding (beyond that offered at start up by our WFBMC Foundation) has been obtained from KBR, TDE and NW AHEC for ~US$700,000 (however, over half of these dollars subsidise FaithHealth efforts in the other seven sites, such as Fellows and Supporters' training, local evaluation and/or Connector stipends).

The tipping point of the overall 'North Carolina Way' was when the non-clinical partners began to adapt, localise and even name the process to reflect their particular assets, intelligence and priorities. This occurred in May 2015 (34 months from start), when WFBMC roles and training were changed, moving to a more distributed and local model, with a less prescriptive and directive focus.

As would be expected, healthcare systems who have been working longer in the community appear to have built larger networks, reflecting longer duration in developing skill and credibility. Forsyth and Wilkes counties have 20% and 25% penetration of total congregations, respectively and also have the longest duration. In terms of rural and urban distinctions, McDowell, the most rural of all counties, engaged the most congregations at a 28% penetration rate, followed by Wilkes at 25% and Watuaga at 12%, Randolph at 6%, Robeson at 5%. More urban counties varied in this indicator.

Forsyth county achieved 20% congregational partner penetration, while urban Gaston and Burke County both had low rates at 8% and 7%, respectively. However, caregiving encounters in the more rural communities tend to be higher in number, especially in geographically large and diverse counties, such as McDowell who have lower access to healthcare services. Across all sites, caregiving needs are consistent. Transportation is the top community need identified, followed by food, social support, medication assistance (funds for obtaining medications or delivery of medications) and other (home repair, light housekeeping, ramp building, paperwork completion).

Timing from start date to tipping points at each site ranged from a low of 10 months (Southeastern Health) to a high of 34 months (WFBMC) in duration from start date, with a mean of 17.5 and median of 11. With the exception of WFBMC's Foundation funding for start-up, Southeastern Health and CaroMont have been most successful in terms of obtaining extramural funding to date, of ~US$100,000 and US$85,000, respectively. All implementation sites with the shortest duration in terms of tipping point sent representatives to the Memphis Adaptation workshop and the Wake Forest Learning Forum, both outlining operational and theoretical principles driving the two networks. All systems also conducted some type of community asset mapping. In terms of community's perceived trust in the health systems, four were rated, 'average', two were rated as 'low' and only one (McDowell) was rated as 'high'.

Discussion

The three initial process indicators promised to the WFBMC FaithHealth Board in July 2012 were achieved by The NC Way: aggregate charity care costs decreased, the network has grown to 346 congregations across NC and the model has achieved national recognition (Gunderson et al. 2015). The tipping point for WFBMC work was in May 2015 (34 months after start date), when a more distributed, less directive and 'top-down' model of partnering was adopted. With respect to those metrics, the work has proven successful.

Lessons learned in adapting the Memphis Model to NC include the following. Training caregivers in churches before there is a structure to engage them can quickly suppress congregational mobilisation efforts and a focus on locally responsive caregiving models with less uniformity has been more useful than WFBMC staff providing coordination oversight. North Carolina churches are more reluctant to sign 'covenants' (partnership agreements), which we believe reflect wariness of 'company town' entanglement, as hospitals are now often viewed by locals as very large companies in such settings (Earle, Knudsen and Shriver 1976). Finally, under-served and minority populations' community distrust in academic medical centers remains strong, given past historical trauma, such as the Eugenics program in NC, which was based at Wake Forest School of Medicine until the early 1970's (Begos et al. 2012). Historical trauma of this magnitude often renders community engagement efforts in marginalised communities ponderous and difficult (Cutts et al. 2016).

These implementation sites will be followed on their progress in terms of decreasing charity care costs, readmission or other healthcare utilisation indicators over the next two years. In terms of the tipping point for the growth of each network, it appears that having other dedicated staff besides the designated healthcare system leader was crucial— and the leaders gained other staff to help achieve their goals.

In terms of community trust in the health systems, McDowell county has engaged the most congregations and community trust is rated as 'high' for their network, which supports our assumption that higher levels of trust correspond to both faster and more robust partnership growth. This could be due to higher levels of trust in the systems being associated with more community engagement or social capital. Interestingly, though, the systems who rated community trust levels as 'low' also engaged both the lowest number of congregations (Southeastern Health) and a relatively high number (WFBMC). Thus, our view that community trust in a health system is necessary for a faith-based partnership to thrive may reflect a more complex relationship, meriting further study.

In terms of rural and urban distinctions, the top two most engaged counties were rural. McDowell, the most rural of all counties engaged the most congregations at a 28% penetration rate, followed by Wilkes (also majority rural) at 25%, then the highest urban county (Forsyth) at 20%, while the more rural Robeson county had the lowest rate at 5%. Both the mostly urban Forsyth county and mostly rural Wilkes county have deeper penetration in terms of overall congregational partners and volunteers per county, but also have longest duration and started the FaithHealth efforts in NC. Rural counties generally have lower numbers of services and access generally, which may lead to more hands-on caregiving due to necessity.

In terms of development practice, it is clear that religious culture is expressed over time in different ways in the various parts of the state of NC, whether that of the predominantly African-American General Baptists, the predominantly white North Carolina Baptists, the more racially diverse United Methodist Church or the more liberal white Cooperative Baptist Fellowship. Given this religious diversity, the NC Way must be adapted to those different histories that continue to shape community faith and culture. Even with current shrinking and relatively low congregational membership (only 25% of the NC population attend faith services regularly, PEW 2015), common variable in faith communities in NC is a willingness to help beyond parish and family, as well as in the willingness of organisational leaders to try models that take congregations seriously. The North Carolina Way, if sustained, reflects both working relationships with clinical relevance to the social drivers of health and healing, and partnerships that are credible to the local social religious reality, whether urban or rural – real work connected in real partnerships. As such, although this experience requires continued study, it is helpful to other health systems building community and congregational partnerships to improve community health.

Acknowledgements/

Huge credit is due to the KBR Fellows cohort, much of whose 'on the ground work' is reflected in this piece: Annika Archie, Dean Carter, Melanie Childress, Phillip Long, Lisa Marisiddaiah, Helen Milleson and Dennis Stamper. We also thank WFBMC colleagues Emily Viverette (Director of FaithHealth Education) and Jeremy Moseley (Director of Community Engagement), as well as Memphis MLH colleague, Bobby Baker (Director of Faith and Community Partnerships) and Randolph Hospital Chaplain Barry Morris for their input on this piece. Chris Gambill (Cooperative Baptist Liaison) deserves special credit for originating the idea of the Connector role, while efforts of Liaisons Leland Kerr (North Carolina State Baptist Convention) and Anita Holmes (General Baptist Convention) are also deeply appreciated. All Connectors and Supporters' work have been critical in building these networks and capturing data.

Funding

We offer thanks to the Kate B. Reynolds Charitable Trust and The Duke Endowment, who funded portions of this work through grant-making, dedicated to more local health system evaluation. Additionally, we thank the WFBMC Foundation Board for funding new staff positions, Forsyth and Davidson county Connector efforts and formative evaluation. We also thank the Baptist State Convention of North Carolina, the Ministers' Conference of Winston Salem and Vicinity, the United Methodist Church and Moravian Church for their support of Connectors' efforts.

Notes on Contributors

Dr. Teresa Cutts is assistant research professor at the Wake Forest School of Medicine's Public Health Sciences Division, Dept. of Social Sciences and Health Policy. **Rev. Dr. Gary Gunderson** is Vice President of the FaithHealth Division at Wake Forest Baptist Medical Center and holds faculty appointments in the Wake Forest School of Medicine and Divinity School.

Teresa Cutts, PhD

Since 2013, Teresa has served as an Assistant Research Professor at the **Wake Forest School of Medicine's** Public Health Sciences Division to work with the FaithHealth team at Wake Forest Baptist Medical Center. After completing a post-doctoral Fellowship in Health Psychology from the University of Tennessee Medical Center in 1988, Teresa worked as a staff psychologist at Baptist Medical Center until 1994 and was in private practice from 1994-2001. From 2001-2005, she served as Director of Program Development at the Church Health Center, a comprehensive, faith-based health program for the under-served. In 2005, she moved to work at the Methodist Le Bonheur Healthcare's (MLH) Interfaith Health Program while serving as the Associate Director of Faith-Based Initiatives in the University of Tennessee HSC and in 2008 Dr. Cutts was named the Center of Excellence in Faith and Health's Director of Research for Innovation. She worked explicitly in the area of evaluation and program development for Methodist's Memphis Model Congregational Health Network, Religious Health Assets mapping, and Integrated Health for congregations, community and clergy. She also served as Clinical Director of the Life of Leaders executive physical and discernment process, designed within the Leading Causes of Life framework.

Dr, Cutts held a joint clinical appointment in both Preventive Medicine and Psychiatry at UT and University of Memphis' SPH from 2003-2008, is Visiting Faculty at the University of Capetown School of Family Medicine and Public Health and has co-authored/published numerous book chapters and articles. Most recently in 2016, with colleagues from Stakeholder Health, she was co-editor and helped co-author many chapters in *Stakeholder Health: Insights from New Systems of Health*.

Gary Gunderson, MDiv, DMin, DDiv (Hon)

Rev. Gary R. Gunderson currently serves as Vice President of FaithHealth and Professor, Public Health Science at Wake Forest University Baptist Medical Center in Winston-Salem, NC. From 2005-2012, he served as Senior Vice President, Faith & Health for Methodist Le Bonheur Healthcare and Director, Center of Excellence in Faith & Health. His leadership roles focus on building the capacity of religious institutions to advance health and wholeness. Since 1992, in the Interfaith Health Program at President Jimmy Carter Center in Atlanta, Gary has explored the confluence of health and faith by working with an international network of community leaders and multi-disciplinary scholars. He is the author of several books, notably *Deeply Woven Roots*, *Boundary Leaders*, and *Leading Causes of Life* (with Larry Pray), *Religion and the Health of the Public* (co-authored by James Cochrane), many articles and hundreds of speeches and presentations to religious and health science groups. He was the Primary Investigator for a landmark contract with the World Health Organization, mapping the religious health assets of two African countries along with scholars from the University of Cape Town and the Universities of Kwazulu Natal and Witswaterstrand. In addition, Gary has served on a range of national and international advisory boards, including the Institute of Medicine, the Duke University Divinity School, the Chicago Theological Seminary Center, and the Wesley Seminary's Doctor of Ministry program. Gary is an ordained American Baptist minister.

Notes

1. It should be noted that in the USA, the term 'health system' usually describes a cluster of health facilities (as opposed to other articles in this collection, where the term 'health system' applies to the entire complex entity inclusive of all health-related facilities and actors.
2. As we write this, the ACA is currently under threat of being repealed with the change of political administration. Regardless, from a healthcare provider perspective, this ethos of community connection is

likely to remain an imperative of the US health system – no matter the political configuration impacting health care delivery.

3. Charity care refers to ' ….the process whereby most hospitals offer care to some patients at no cost when they fit certain criteria. This is known as charity care. Bed debt, on the other hand is when bills go unpaid because patients are unable or unwilling to pay… and arises in situations where patients have not requested or do not qualify for financial assistance." (Value Healthcare Services, 2013).

References

AHRQ (Agency for Healthcare Research and Quality). 2014. "Service Delivery Innovation Profile: Church-Health System Partnership Facilitates Transitions from Hospital to Home for Urban, Low-Income African Americans, Reducing Mortality, Utilization, and Costs." *Profile*. AHRQ. Accessed June 23 2016. https://innovations.ahrq.gov/profiles/church-health-system-partnership-facilitates-transitions-hospital-home-urban-low-income.

Ashe, Marice, Dora Barilla, Eileen Barsi, and Stephanie Cihon. 2016. A Systems Thinking Approach to the Social Determinants of Health. In *Stakeholder Health: Insights from New Systems of Health, edited by Teresa Cutts and James R. Cochrane,* 5-22. USA: Stakeholder Health.

Barnes, Priscilla, Teresa Cutts, Stephanie Dickinson, Hao Guo, Danielle Squires, Sean Bowman, and Gary Gunderson. 2014. "Methods for Managing and Analyzing Electronic Medical Records: A Formative Examination of a Hospital-Congregation-Based Intervention". *Population health management* 17 (5): 279-286. doi:10.1089/pop.2013.0078.

Barnett Kevin, Teresa Cutts, and Jeremy Moseley. Financial Accounting that Produces Health. 2016. In *Stakeholder Health: Insights from New Systems of Health,* edited by Teresa Cutts and James R. Cochrane, 124-147. USA: Stakeholder Health.

Begos, Kevin, Danielle Deaver, John Railey, Scott Sexton and Paul Lombardo. 2012. *Against Their Will: North Carolina's Sterilization Program and the Campaign for Reparations*. Appalachiocola, FL: Gray Oak Books.

Bureau of Labor Statistics, Quarterly Census of Employment and Wages (manufacturing employees by state). 2012. Accessed Jan. 10, 2017. http://www.bls.gov/cew/.

Campbell, Marci. K., Marlyn A. Hudson, Ken Resnicow, Natasha Blakeney, Amy Paxton, Monika Baskin. 2007. Church-based health promotion interventions: evidence and lessons learned. *Annu. Rev. Public Health*, *28*, 213-234.

Case, Anne and Angus Deaton. 2015. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences of the United States of America,* 49(112), 15078-15083.

Cutts, Teresa. 2011. The Memphis Congregational Health Network Model: Grounding ARHAP Theory. In *When Religion And Health Align*, In Cochrane, James R., Barbara Schmid, Teresa Cutts (Eds.), 193-209. Pietermaritzburg: Cluster Publications.

Cutts, Teresa, Sarah Langdon, Francis Rivers Meza, Bridget Hochwalt, Rita Pichardo-Geisinger, Brandon Sowell, Jessica Chapman, Linda Batiz Dorton, Beth Kennett and Maria Teresa Jones. 2016. "Community health asset mapping partnership engages Hispanic/Latino Health Seekers and Providers". *North Carolina medical journal* 77 (3): 160-167. doi: 10.18043/ncm.77.3.160

Cutts, Teresa, Raymond, King, Maureen Kersmarki, Kirsten Peachey, Jason Hodges, Sherianne Kramer, Sandy Lazarus. (2016). Community Asset Mapping: Integrating and Engaging Community and Health Systems. In Cutts, Teresa and James R. Cochrane (Eds.), *Stakeholder Health: Insights from New Systems of Health* (pp. 73-95). USA: Stakeholder Health.

Cutts, Teresa, Gerald Winslow, Gary Gunderson, Kirsten Peachey, Marice Ashe. (2016). Introduction. In Cutts, Teresa and James R. Cochrane (Eds.), *Stakeholder Health: Insights from New Systems of Health* (pp. 1-3). USA: Stakeholder Health.

Cutts, Teresa and James R. Cochrane, (Eds.). 2016. *Stakeholder Health: Insights from New Systems of Health*. USA: Stakeholder Health.

Savigny, D., and T. Adam, (Eds.). 2009. *Systems Thinking for Health Systems Strengthening*: Geneva: World Health Organization.

Earle, John R., Dean D. Knudsen, Donald W. Shriver. 1976. *Spindles and Spires*. Atlanta: John Knox Press.

Germond, Paul, James R Cochrane. 2010. Healthworlds: conceptualizing landscapes of health and healing. *Sociology*, 44(2), 307-324.

Gladwell, Malcom. 2000. *The Tipping Point*. Boston: Little, Brown.

Grimes, William T. 1972. "The History of Kate Bitting Reynolds Memorial Hospital." *Journal of the National Medical Association* 64 (4): 376-381.

Gunderson, Gary R., James R. Cochrane. 2012. *Religion and the Health of the Public*. New York: Palgrave Macmillan.

Gunderson, Gary R., Teresa Cutts, James R. Cochrane. 2015. *The Health of Complex Human Populations*. Institute of Medicine. Accessed 23 June 2016. https://nam.edu/wp-content/uploads/2015/10/Health-of-Complex-Human-Populations.pdf.

HSLG (Health Systems Learning Group). 2013. *Strategic investment in shared outcomes: transformative partnerships between health systems and communities*. Stakeholder Health. Accessed 23 June 2016. http://stakeholderhealth.org/wp-content/uploads/2013/09/HSLG-V11.pdf.

Karpf, Ted, Jeffrey V. Lazarus, Robin Y. Swift, Todd Ferguson. 2008. *Restoring Hope: Decent Care in the midst of HIV/AIDS*. University of California: Palgrave-Macmillan.

Khazan, Olga. Middle-aged white Americans are dying of despair. *The Atlantic, xx?* Accessed Jan. 10, 2017. http://www.theatlantic.com/health/archive/2015/11/boomers-deaths-pnas/413971/

Koenig, Harold, Dana King, Verna B. Carson. 2012. *Handbook of Religion and Health, Second Edition*. New York: Oxford University Press.

Marmot, Michael, Jessica Allen, Ruth Bell, Ellen Bloomer, Peter Goldblatt. 2012. "WHO European review of social determinants of health and the health divide." *The Lancet* 380, no. 9846: 1011-1029.

Norris, Tyler, Thomas Howard. 2015. *Can Hospitals Heal America's Communities? "All in for Mission" is the Emerging Model for Impact*. Democracy Collaborative. Retrieved from http://democracycollaborative.org/content/can-hospitals-heal-americas-communities

PEW. 2015. http://www.pewforum.org/religious-landscape-study/ America's Changing Religious Landscape, May 12, 2015.

Putnam, Robert D., David E Campbell. 2010. American Grace: How Religion Divides and Unites Us. New York: Simon and Schuster.

Stine, Nicholas W., Dave A. Chokshi, Marc N. Gourevitch. 2013. "Improving Population Health in US Cities". *JAMA* 309 (5): 449-450. doi:10.1001/jama.2012.154302.

Winslow, Gerald, Fred Smith, Don Stiger, Dora Barilla, and Cynthia Carter Perrilliat. (2016). Mission and the Heart of Healthy Communities. In Cutts, Teresa and James R. Cochrane (Eds.), *Stakeholder Health: Insights from New Systems of Health* (pp. 185-192). USA: Stakeholder Health.

Value Healthcare Services. Defining charity care at hospitals. Accessed 1/20/2017. http://valuehealthcareservices.com/education/defining-charity-care-at-hospitals/