POPULATION HEALTH AND THE FUTURE OF NURSING (POPULATION HEALTH IN NURSING: CONCLUSIONS) FEBRUARY 2020





Background

The United States continues to spend more on health care than any other nation in the world while experiencing some of the worst health outcomes in the developed world. Many analysts have concluded that this deficit is due to social factors outside the usual purview of the formal health care system. This has sparked a new interest in population health and its role in creating a just and sustainable health care system.

This paper is the third in a series considering what this new interest means for the profession of nursing. It is the conclusion of the Population Health in Nursing project at the Center to Champion Nursing in America, an initiative of the Robert Wood Johnson Foundation, AARP, and the AARP Foundation. The first phase of the project (PHIN 1) considered population health in nursing education. In the second paper (PHIN 2), the authors examined various concepts of population health being used in the field and what they might mean for nurses. Finally, in this paper, the authors share their conclusions.

Below, the nurses of the PHIN team reflect on all they have learned and ask how the nursing profession can best respond to the challenges and opportunities presented by the new focus on population health. First, they consider their findings in the context of their identities as nurses, fitting what they learned into the profession's enduring principles. Second, they outline the specific actions they believe are most important for the nursing profession to best serve the health of everyone in America going forward.

Nursing Principles: Everything Old is New Again

In recognition of the 200th anniversary of Florence Nightingale's birth, the World Health Organization declared 2020 to be the International Year of the Nurse and Midwife. At the same time, the National Academies of Medicine are in the process of preparing a new report on the future of nursing that will build upon its influential 2010 paper, "The Future of Nursing: Leading Change, Advancing Health." As a result, many nurses are reflecting on the history and future of their profession. In connection to population health, these reflections can lead to both pride and frustration.

From its earliest days, the nursing profession has insisted upon addressing health factors beyond the biophysical, often strenuously advocating for this holistic view in defiance of conventional wisdom and institutional authority. Many of the principles of population health being advanced today would not have been unfamiliar to Lillian Wald.

At the same time, many nurses recognize that they, along with much of the rest of the health care system, have become disconnected from the kind of humanistic care patients deserve. So our hope is that the new push for population health today might catalyze a new phase in the evolution of nursing's professional character. Below we have listed the nursing principles we think are most relevant to this moment, as well as the opportunities for the renewal of those principles that an emphasis on population health provides.

THE WHOLE PERSON - Nurses have always seen patients holistically, but today they must do so in the context of systems — From the inception of the profession, nurses have strived to see patients as complete people, not just collections of symptoms. The earliest professional nurses and every generation since have felt that this way of seeing results from a humanistic ethic of care. Nurses care for patients as people whose lives and communities impact their overall health and well-being. This vision has included the impacts of poverty, violence, racism, and other forms of social injustice. As the nursing profession has become more embedded in hospitals and other formal health care settings, nurses have often taken on the burden of preserving this kind of personal care in the face of impersonal systems. But ironically, in the future, nurses' familiarity with systems may be just as important to address population health needs as the ethic of care has traditionally been.

In our investigations, we found that the most effective population health advocates are connecting patients' problems with larger systems where they can make a practical difference. These leaders also viewed health care providers' unfamiliarity with other social systems as a serious deficit. Providers must improve their capacity to interface with systems like housing, transit, and schools to address patients' needs broadly. Today's nursing profession is well-positioned to synthesize an understanding of these systems with our duty to see patients as complete individuals. All nurses should keep asking how we can more effectively understand all of the systems that impact our patients and translate them into real options for better health. Nurses already practice across society in hospitals, homes, schools, factories, city streets, and prisons. The future of nursing must include connecting the factors and systems that impact those places with the health care system in practical ways that improve patients' health.

PATIENT ADVOCACY - Nurses have always advocated for patients, but today they must employ new tools to advocate for populations — Patient advocacy is a key tenet of the nursing profession. Today it is most visible when nurses listen to patients' concerns and combine them with their clinical observations, then help them make

informed decisions and seek resources that otherwise might not be available to them. This fearless advocacy for individual patients is the foundation of the public's well-documented trust in nurses. But the earliest professional nurses were also advocates for populations, effectively articulating to the public the social injustices and unmet health needs faced by tenement-dwellers, factory workers or veterans of war.

Renewed interest in population health gives nurses the opportunity to revive this distinctive social justice tradition. But to advocate effectively, they must have and use the best tools. Our research highlighted several new technologies that are being used to understand population health problems and solutions. Nurses should master digital tools that help them more efficiently assess populations, evaluate interventions, and ensure those interventions' sustainability. Just as importantly, nurses must be treated as an essential user group whenever such tools are being designed. This is not to say that nurses should unthinkingly embrace every technocratic nuance of contemporary health care; they should continue to advocate for reforms that make access to care more understandable and just. But an understanding of data and payment systems is an essential tool to advocate for the populations we serve.

PARTNERING WITH PATIENTS - Nurses' distinctive approach to advocacy has usually included collaborative planning with patients; today, that approach should be extended to populations and communities — In many patients' encounters with the health care system, nurses are the only people who make them feel seen, understood, and capable as they cope with illness. Nurses help patients make informed choices in the face of systems that can often feel hostile and dehumanizing. Though nurses have at times been complicit in dehumanization, the best of the nursing tradition defies it through bold advocacy across barriers of race, class, and creed. Every day, nurses across America go the extra mile to help patients live their healthiest lives on their own terms, even when that work involves negotiating complex social, cultural, or bureaucratic issues. Nurses work to say "yes" to their patients even when others say "no." That stems from our insistence that patients' preferences matter.

Again and again in our investigations, population health advocates argued that the ability to work collaboratively with populations is key to lasting health improvement initiatives. It is clear that nurses have the character and determination to do this kind of work, as well as some of the skills. Nevertheless, to deliver the kind of care patients deserve, nurses need to deepen their experience by seeking out more opportunities to participate in and lead these collaborative efforts. This will sometimes force nurses to move outside of their clinical and cultural comfort zones. The role they should play in

these kinds of collaborations may not be immediately clear. But as many a community organizer has discovered, the first step is often just showing up.

The nursing profession should pursue more opportunities for nurses to "show up" for populations and communities at all levels of practice. Nursing schools and employers should create or encourage experiences that help nurses get to know the communities they serve. Nurse managers and other leaders can form relationships with community leaders and advocates that help them co-design health efforts on behalf of populations experiencing specific problems. Nurses who work in the policy arena should make it clear why nurse voices belong in conversations about transit, drug policy, mass incarceration, and other issues. Broad engagement by nurses at all levels of practice will give us the foundation of relationships we need to be true partners with those we care for.

component of nurses' efforts to stop disease; today, population health should be an essential component of nurses' efforts to preserve health — The profession of nursing developed alongside the emergence of modern public health and the germ theory of disease. Our profession was part of a revolution that saved millions of people from history's greatest killers and created the modern standard of living. The network of tools that protects this standard of living, which includes everything from childhood vaccinations to responsible end-of-life planning, depends on a qualified nursing workforce. All nurses — not just public health specialists — should take pride in this achievement.

But the frontier of public health has moved on from infectious diseases. The data shows that it is now chronic conditions that hold back life expectancy and drive unsustainable costs. We sometimes forget that this is the real reason social determinants of health are so relevant; they represent not just a grave social injustice, but a cause of poor health as urgent now as tuberculosis and polio were a hundred years ago. This new understanding of disease and health should transform every aspect of the nursing profession. The nurses of the past did not work to improve sanitation in slums because that was their preferred practice environment; they did it because that's where the diseases were. Today's top killers can be traced back to inequities that are written into policy, economics, and the built environment.

Though it's inevitable that some nurses will spend more time grappling with these issues than others, every nurse's training and practice should reflect the current

understanding of the greatest threats to their patients' health and provide real options for responding. For most nurses, the most relevant context is the continuum of care. Many nurses may not be in a position to help patients with, say, the long-term trends that make childhood asthma worse in economically disadvantaged neighborhoods. But they should absolutely be able to help parents think, as part of after-care planning, about how to best protect children with asthma from air pollution. Tackling institutional racism may be beyond the scope of an individual nurse, but every nurse should be aware of how black mothers giving birth in America experience worse care outcomes than white mothers. These population health factors are the critical context for modern nurses' pursuit of their calling.

Action Items: What Nurses Should Do Now

As we interviewed thought leaders and visited locations around the country, we were always impressed by the degree to which nurses are engaging with the practice of population health. Yet almost no one could offer an authoritative answer as to the most important role nurses should be playing in the struggle to reverse declines in health outcomes in America. So based on our observations, we developed our own agenda for the future of population health in nursing. We believe our profession should adopt the following goals for the next decade:

1. START WITH ASSESSMENT — As a profession, nurses should take responsibility for the accurate assessment of unmet social needs as they relate to health, as well as the responsible use of this data in health care systems. Accurate assessment is at the heart of nurses' professional identities. No matter the clinical setting, nurses are likely to be the first people to see patients and describe the factors affecting their health, including unmet social needs. For this reason, we believe that the most important first step in helping nurses address population health is giving them the tools and support they need to properly assess social factors. Ultimately, we believe that nurses will be the single most important profession responsible for the accurate assessment of social factors and their impact on health, especially as they relate to the provision of care.

Of course, this work will require collaboration with many other different professions concerned with population health. It will also require systems change that nurses cannot lead alone. Nevertheless, we believe that for nurses, improving assessment is the most important immediate opportunity where our professional skills, values, and interests

converge. We recommend that the nursing profession adopt an intentional, systematic strategy to continuously improve the assessment of social data in all contexts where we practice. All of our recommendations can be viewed as contributing to this strategy.

This quest for better assessment is part of nursing's past, present, and future. Looking at the past, we see that our capacity to assess social factors derives from our unique history and foundational values. Nurses have always been concerned with seeing the patient as a whole person. Advocating for the well-being of people has often required reckoning with social and emotional factors that were not understood as the health care system's concern. In the formative decades of the profession, nurse leaders emphasized the importance of treating patients in their homes and neighborhoods. Though today's nursing profession is more tightly tied to hospitals and clinics, nurses have nevertheless retained some of their ability to perceive how factors outside the health care system impact patients' health.

So nurses' past already provides us with some capacity to perceive patients' unmet social needs. But here in the present, we still have much work to do if we hope to translate that perception into data that can be used to improve population health.

It starts with the experience of assessment itself. Many health care systems are now beginning to collect data on unmet social needs in patients. Nurses are inevitably involved in this data collection. In some cases, its potential to help patients is incredibly exciting. However, we must also recognize there are still some serious problems to be resolved with assessment based on this data. Social needs data is still a long way from the consistency and reliability of blood pressure or cholesterol levels; improving the integrity and usefulness of this type of data is likely a decades-long project. Yet many nurses are finding they are responsible for it now whether they are ready or not.

To meet this challenge, nurses will need to work with a wide variety of professions to explore what metrics are most appropriate and how they can be assessed. For example, it may be that factors that are more proximate to the health care system (like missed appointments) can be more easily assessed and used in care planning than more complex root causes (like unreliable access to transit). Many such questions need to be resolved through empirical research and analysis in a variety of different care settings.

Furthermore, there will always be an interpersonal factor in asking about homelessness or child abuse that is not present with biophysical data. Since much of this data is

collected by nurses, it is our duty to ensure that these assessments are done in ways that are accurate and respectful of patients and communities. Data about unmet social needs should not be collected without a clear purpose in mind. Bias in questioning and retraumatization must be avoided. When such practices do occur, nurses should question them — and they should be supported by their profession when they do.

A good first step in building that support would be for the nursing profession to conduct a comprehensive review of existing social factors assessment practices and nurses' roles in administering them. Such a review could discover the most immediate problems with social needs assessment and support nurses in efforts to correct them. This would provide nurses with an opportunity to leverage our existing skills in community education and trust-building to advance our profession and better serve the populations we already touch. Professional societies should be ready to assist nurses facing conflicts over assessment practices that disrespect patients or fail to advance their health.

Addressing these issues in the present could open new opportunities for nursing's future. One of the most exciting is moving past the assessment of immediate unmet social needs to the more complex problem of assessing social determinants of health.

Pioneering studies have demonstrated that a select group of social factors have long-term effects on health. Many of the chronic diseases most seriously threatening life expectancy in America can ultimately be traced back to poverty, racial discrimination, adverse childhood experiences, and the neighborhoods where people were raised. Collecting and using this kind of longitudinal information in a practical way is a much more complicated matter than assessing present-day social needs.

But the potential of using social determinants of health as a part of patients' health planning cannot be ignored. Nurse educators and other leaders in the profession should insist on clear differentiation between current unmet social needs and the long-term social determinants of health, and promote efforts to more effectively assess both sets of data appropriately. Nurses who work in policy and public health should take the lead in making this important distinction clear and helping all providers incorporate it into their thinking.

It is critical to remember that no one yet knows the best way to leverage social determinants of health to improve systems. Measuring factors like childhood trauma will be meaningless if it does not lead to concrete improvements in population health. It will

be essential to guarantee that plans incorporating this data are scientifically shown to improve people's lives, not just reduce costs. Data must also be collected and deployed in ways that avoid unfairly stereotyping populations and causing them additional harm. Nurses' professional values and connections with the communities they serve can serve as an important bulwark against these risks.

If we can sufficiently guard against the risks, the opportunities that could be opened up by the accurate assessment of unmet social needs and social determinants of health are almost unprecedented. Adequately addressing these factors and the role they play in health could lead to system-wide improvements in the 21st century similar to those that vaccinations or antibiotics yielded in the 20th. Understanding and responding to social determinants of health would also be an important blow against injustice and inequality in American society.

Not all of these improvements will originate in the health care system, but the health care system will be a critical source of data on how all of these factors relate to health and whether efforts to address them actually lead to better outcomes. That all starts with accurate assessment, and accurate assessment should start with nurses.

2. ENHANCE QUANTITATIVE REASONING - In nursing education, ensuring improvement in assessment and connected health outcomes will require several changes. Most urgently, all nurses will need sufficient training in the kind of quantitative reasoning required to collect and use data on social factors. All nursing already requires a degree of mathematical competency. Many nurses also take courses in health care economics and biostatistics that demonstrate their capacity to handle mathematical concepts more sophisticated than those they currently use in daily practice. But the most successful population health initiatives have demonstrated their effectiveness through distinctive quality improvement methods that combine thinking about assessment, outcomes, and costs in a real-world context. Several of the population health sites we investigated have developed internal curricula to ensure that nurses and other providers have the necessary skills to contribute.

Nursing schools and professional societies should collaborate with population health leaders to incorporate these essential skills into curricula and certification. To some extent, this will require improvement in nurses' core data analysis skills. But a much more salient factor is connecting analytical skills to the population health practice environment. For example, nurses who may be perfectly capable of completing a statistical problem from a textbook may be vexed by cumbersome public records

systems or the data visualization work necessary to translate a spreadsheet into a hotspot map. In many cases, faculty who teach nurses to think about data need to set aside their textbooks and consider what specific skills are in the greatest demand.

Another important front for improvement is thinking about how data is used after it is generated. Leveraging data to create population health reforms requires a raft of "soft skills" that are often underemphasized in nursing education: building relationships, organizing teams, public speaking, media relations, program design, and more. Rather than add classes that convey these skills as formal knowledge, nursing schools should look to create real-world learning environments where students can collect data and then use it to improve population health outcomes. Students, faculty, and practitioners in the field should become familiar with concepts like community-based participatory research and other methods for collaborating with the populations nurses serve. Even elementary experiences like presenting data to a city council meeting as opposed to a professional poster session will help nurses build the competencies they need to do this work. Schools should also look to create more specialized programs that develop leaders in leveraging data to improve health outcomes.

3. ADD POPULATION HEALTH PRACTICE TO ALL SCHOOLS - By the end of this decade, every school of nursing should be a participant in a population health partnership that is highly integrated into its curriculum and gives students the opportunity to develop relevant real-world skills. Learning at the bedside has always been key to nursing education. Many nurses look to clinical placements as the moment when their professional identities became real to them. Many of the nurse educators and population health leaders we interviewed were optimistic about clinical placements in population health. Some sites even hosted nursing students or post-graduate scholars who were learning about specific populations or health issues.

All of this is good, but insufficient for the scale of the population health challenge. Realizing the revolution in social assessment we call for here will require an exponential increase in population health learning opportunities — enough for every nursing student to at least sample this type of practice. Yet as we learned from the leaders of population health partnerships, the relationships at the core of these initiatives cannot be one-sided or superficial. Therefore, it is logical that nursing schools should serve as the consistent, long-term partners in such initiatives. Such population health partnerships would help schools serve their communities while also providing learning and research opportunities for students and faculty.

Of course, many schools have already built community relationships that could provide the starting point for robust population health partnerships. Nursing students may volunteer at free clinics, or nursing schools' associated universities and hospitals may have community outreach initiatives where nurses work. But we believe that few schools currently participate in initiatives with all the hallmarks of the best population health partnerships. These include collaboration with a variety of stakeholders, a focus on specific population health goals, measurement practices to assess whether those goals are being met, and an ability to strategically pivot when health improvements are not being realized.

In short, it's much bigger than a single program or grant. Nursing schools need to nurture relationships with stakeholders in population health partnerships that are as consistent, robust, and respectful as the one-on-one relationships nurses regularly create with patients and families. That means seeing partner organizations holistically rather than instrumentally, whether they are large hospital systems or informal community clubs. It means creating relationships that transcend one intervention or study. Deans of nursing schools should not just be able to discuss the success of programs they've nurtured, but of associated populations too. Faculty and students should not be surprised when leaders from a population health partnership deliver guest lectures in their classes or when multiple class assignments require visits to the same senior centers or schools. Participation in population health partnerships should become an expected and welcome part of nursing student life.

In calling for all nursing schools to participate in such partnerships, we recognize that schools have vastly different attributes and needs. For example, an ideal partnership would include frequent opportunities to provide care as part of interprofessional teams with physicians, pharmacists, dentists, social workers, and others, but this may not be possible in all communities. Some schools will serve as the leaders of such partnerships, using their status as anchor institutions to convene stakeholders across a city or state. Others may participate in more narrow ways, providing technical support to existing community coalitions. Nevertheless, we hope that nursing schools and professional societies will see the merit in this goal, establishing best practices for population health partnerships and eventually encoding some of these into accreditation standards.

4. BUILD A POPULATION HEALTH LEARNING COLLABORATIVE - In the practice sphere, nurses' efforts to improve the assessment of use of social data will require good relationships with population health sites. We call on nursing

professional societies to create a national think tank to test out models and share best practices. As we explored the many different settings where population health is being practiced in the United States, we were pleased (though not surprised) to find nurses everywhere. Even when addressing factors that would seem to be far from the profession's core concerns, population health partnerships generate many opportunities for nurses to live out their vocations. Since population health will be more and more relevant in the future, this is good news for the nursing profession.

Nevertheless, most population health initiatives are not led by nurses. Our informants emphasized that every initiative may need a different kind of leader, and no one profession should have the monopoly on population health. But if nurses are going to make the major contribution to assessment that we envision, our profession will need a more robust, continuous conversation with the people who are doing the most ambitious work to make populations healthier.

Therefore, we encourage the major nursing professional societies to create a collaborative initiative where nurse leaders in practice and academia can become more familiar with many different population health practice models. These leaders should learn more about the precise ways in which these initiatives are drawing upon the skills of nurses and what new skills they would like to see in the future. Executives and academics alike could use this venue to learn more about the populations nurses will serve and the specific problems they face. The collaborative could also provide an environment in which nurses' ongoing research into assessment can be evaluated and shared.

There are many different ways in which such a collaborative could be realized; we offer the following as a template for inspiration. Picture an annual event hosted by multiple nursing organizations where some of the most ambitious population health partnerships are celebrated on a national stage. Imagine leading nurse scholars discussing the aspects of these models that can be emulated, while also giving them thoughtful critiques. The event could also include workshops where nursing students, faculty, and professional leaders come together with population health trailblazers to design novel solutions to entrenched challenges and emerging concerns. The gathering could also be a setting to showcase new technologies or codify best practices. The community catalyzed by this annual symposium might lead to journals, online forums, continuing education opportunities, and more.

We do not argue that this is necessarily the best form for a sustained conversation between the nursing profession and population health leaders. The issue merits further study and discussion. But some new venue for this collaboration should be created as soon as possible.

5. CREATE A NATIONAL AGENDA FOR ASSESSMENT IMPROVEMENT - The nursing profession should also launch a comprehensive quality improvement initiative in the assessment of social needs, similar to recent efforts to reduce medical error and improve patient safety. This initiative, which could be housed in the national think tank described above, should prioritize areas where nurses have the greatest opportunities to improve care. As enthusiastic as we are about collaboration between nursing leaders and emerging population health partnerships, we must recognize that the vast majority of nurses still practice within the traditional health care system and will only occasionally encounter population health concepts. Yet interest in social factors from traditional health care actors, like hospitals and payers, is increasing significantly. Institutions are trying all sorts of experiments in population health — some inspired, some inchoate. To some frontline nurses, "social determinants of health" and "health equity" are already starting to sound like just another set of management buzzwords.

The nursing profession must insulate itself against this kind of cynicism by proactively engaging with traditional health care's new relationship to social factors. The profession has already demonstrated an ability to use its expertise and ubiquity to enact reforms, such as the quality improvement and patient safety initiatives led by nurses over the past several decades. The nursing profession should look to this particular mix of research, advocacy, and education as a model for improving the assessment of social factors and the way this data is used within systems. Health care decision-makers should come to expect that all nurses will insist on the the responsible use of social factors as a matter of professional competency and personal integrity.

Specifically, nurses should prioritize the development of metrics where nursing competencies, population health gains, and cost savings intersect. Pushing the envelope on these specific metrics will help us translate improvements in assessment into the most effective interventions.

At several of the population health sites we investigated, we discovered an interesting phenomenon we nicknamed "sweet spots." In these initiatives, nurses were tapped to provide specific services that are part of their credential but frequently underutilized.

Such "sweet spots" exist in some form for nearly every chronic disease. Nurses' existing abilities to provide services like care transition planning, diabetes education, medication management, and similar services are being underutilized. Similarly, nurses are an underutilized intellectual resource in adapting these services to specific populations at scale. In an ideal implementation, these services would be paired with quality improvement initiatives or population health projects that are known to improve patient outcomes and lower costs. These results can then be used to scale up the initiatives within health care systems.

Given the many different health problems faced by the population of the United States, there are likely hundreds or thousands of distinct approaches that would be used to improve health outcomes while decreasing costs. But it is only logical that the nursing profession should prioritize practices that they are already authorized to provide. In many cases, activating these initiatives might require just a small effort to educate health care executives about nurses' skills or partnering with policy makers to effect small, specific reforms in scope of practice. Once these "sweet spots" are identified, studied, and replicated, they can serve as seeds for population health reforms nationwide.

In an ideal world, all these components of a new movement for population health in nursing will work together synergistically. But all of them flow from and feed back into our starting point: an improved capacity to assess and address current social needs and the social determinants of health. This capacity will give the nursing profession a unique, substantive role to play in its interactions with health care system leaders, population health advocates, and community stakeholders. It will provide the clues necessary to find the "sweet spots" and expand upon them responsibly. It will give nurses the data and credibility they need to build new population health partnerships around their schools. And finally, it will reinforce core principles of the nursing profession and help us address communities' most significant needs for generations to come.

This report was authored by Mary Sue Gorski, PhD, RN; Patricia Polansky, RN, MS; and Susan Swider, PhD, PHNA-BC, FAAN.