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Three-Year Nursing PhD Model Recommendations from the RWJF Future of Nursing Scholars

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Abstract

Background: In response to the 2011 *Future of Nursing* report, the Robert Wood Johnson Foundation created the Future of Nursing Scholars (FNS) Program in partnership with select schools of nursing to increase the number of PhD-prepared nurses using a 3-year curriculum.

Method: A group of scholars and FNS administrative leaders reflect on lessons learned for stakeholders planning to pursue a 3-year PhD model using personal experiences and extant literature.

Results: Several factors should be considered prior to engaging in a 3-year PhD timeline, including mentorship, data collection approaches, methodological choices, and the need to balance multiple personal and professional loyalties. Considerations, strategies, and recommendations are provided for schools of nursing, faculty, mentors, and students.

Conclusion: The recommendations provided add to a growing body of knowledge that will create a foundation for understanding what factors constitute “success” for both PhD programs and students.

Nurses with a research-focused PhD degree are vital for advancing nursing science through knowledge development for the improvement of health, patient care, and policy (Hassmiller, 2013; Institute of Medicine [IOM] Committee on the Robert Wood Johnson Foundation [RWJF] Initiative on the Future of Nursing, 2011; National Academies, of Sciences, Engineering, and Medicine, 2021). Presently, the number of PhD-prepared nurses available

to meet the current and future needs of the profession is subpar. In fact, less than 2% of nurses hold a doctoral degree and even fewer of those have graduated with a PhD (Smiley et al., 2018). Although the annual number of nurses graduating with a Doctor of Nursing Practice (DNP) degree has skyrocketed over the last decade, the quantity has stalled (Campaign for Action, 2021).

In 2011, the IOM (now the National Academy of Medicine) Committee on the RWJF Initiative on the Future of Nursing released, *The Future of Nursing: Leading Change, Advancing Health*. In response to the findings of the IOM Future of Nursing report, RWJF funded the creation of the Future of Nursing Scholars (FNS) Program. This program is a national initiative in partnership with select schools of nursing within the United States to increase the quantity of PhD-prepared nurses using a 3-year curriculum model and emphasizing rigorous development in scientific, leadership, education, and policy and advocacy skills (Hassmiller & Reinhard, 2015; RWJF, 2015). The purpose of this article is to discuss key issues and strategies for success in a 3-year nursing PhD program based on lessons learned from scholars of the fourth cohort of the FNS Program. Recommendations for nursing PhD students and mentors are integrated throughout. Additional implications for schools of nursing and other stakeholders are also provided. To our knowledge, no article to date has articulated recommendations from the FNS scholars to various stakeholders of 3-year PhD programs. We aim to fill this gap.

The issues and recommendations described are based on the personal experiences of a selection of scholars ($n = 15$) and do not reflect those of the RWJF, the FNS Program, the national cohorts of scholars at large, or individual institutions of higher learning. However, this work may inform the work of all stakeholders invested in a 3-year PhD completion timeframe. Additionally, this work may provide insight for curriculum development within nursing PhD programs worldwide. Foundational ideas addressed in this article were previously presented as workshops during the 2020 Midwestern and Eastern Nursing Research Societies Virtual Conferences.

BACKGROUND

The demand for adequately trained nurses across myriad domains of practice is expected to escalate far into the foreseeable future (Campaign for Action, 2021; National Academies of Sciences, Engineering, and Medicine, 2021; Smiley et al., 2018; Trautman, 2020; World Health Organization, 2020). Notably, nurses can and should be called upon to address the important health and social inequities confronting health on a global scale (Hassmiler, 2019). To advance this goal, the RWJF commissioned the National Academy of Medicine to produce a consensus report on the role of nurses in addressing health inequities, to be published as the second in a series of *Future of Nursing* reports. The RWJF has invested more than $671 million in initiatives to strengthen the nursing profession since the foundation's start in 1972 and addressing inequities has been among the goals of its funding for nurse initiatives in recent years (S.B. Hassmiller, Senior Advisor for Nursing at RWJF, personal communication, January 10, 2021).

The IOM (2011) *Future of Nursing* report called for doubling the number of nurses with a doctorate (both DNP and PhD) by 2020 to address the shortage of nurse faculty and researchers. The RWJF decided to focus on PhD education primarily because the number of PhD graduate numbers were not experiencing adequate growth. Before the report was issued, the American Association of Colleges of Nursing ([AACN], 2018) had started addressing PhD nursing completion timelines and some schools and foundations had moved to testing accelerated PhD programs, such as the University of Texas Houston, the Gordon and Betty Moore Foundation, and the Hillman Foundation. The FNS Program, with its 3-year completion requirement, was instrumental in rapidly developing accelerated nursing PhD programs nationwide.

The FNS Program began in 2013, representing a bold statement on behalf of RWJF that health care would require a well-equipped cadre of PhD-prepared nurses—assembled in an expedited fashion—to foster the scientific substance of the profession and contribute to the world's health needs through scholarly advancements. The FNS Program, headquartered by the University of Pennsylvania, developed the innovation and policy programming to support a 3-year curriculum created by nursing PhD programs. The program was not intended for all schools or all students but was offered as a support system to help schools identify necessary resources and curricular changes. Selected schools were asked to make an incredible change: they were asked to break with the tradition of a 5- to 7-year student trajectory in exchange for a 3-year option in alignment with the needs of the profession and the public.

ADOPTING A 3-YEAR NURSING PHD

Several key issues associated with a 3-year nursing PhD include the rationale for nurses to embark on a scientific career path, mentorship, data collection options, methodological considerations, and opportunities to optimize work-life balance while attending to multiple personal and professional loyalties.

Embarking on the PhD Journey and a Career as a Scientist

Nurses seeking a terminal degree have several options, including the DNP and PhD. The focus and application of these degrees vary; therefore, the nurse should consider their personal and professional goals before choosing the best fit (Smith, 2015). Those pursuing a PhD can expect to receive rigorous training in theoretical and conceptual design, data analysis techniques, and methodological approaches, among other content. Whether the prospective student is a practicing bedside nurse, nurse educator, nurse leader or an advance practice nurse, the transition to a full-time PhD student role is challenging (Stanfill et al., 2019). To leverage chances for success, nurses preparing to enter PhD studies should engage in self-reflection regarding their time management skills and identify their strengths and opportunities for growth (Gosling & Noordam, 2011; Lantsoght, 2018).

There are several steps that a nursing PhD student can take to ensure success as they embark on a career as a nurse scientist. Establishing good practices and developing a supportive network within and beyond their school's program are key goals (Conn et al., 2014; Green, 2016). The beginning of a PhD program will inevitably entail struggles, uncertainty, and

growth; it is important for the nursing students to recognize this as a time of transition. Early in the PhD program the student should work on establishing relationships within their student cohort and with their mentors, developing organizational and time management skills, and identifying a research focus (Jones-Hooker et al., 2020).

Although the need for self-reflection is imperative for all nurses entering PhD programs for any length of time, it is particularly relevant for those entering an accelerated journey given rapid expectations to achieve milestones and complete coursework. For example, the FNS Program offered each cohort a “boot camp” training to help scholars meet their national cohort of scholars, identify their communication style, and determine how that style was reflective of their personality. Since time is of the essence for these students, this self-reflective “jump start” assisted them in becoming familiar with their own working and communication preferences prior to starting the academic rigor. Scholars were reminded of the importance of long-term planning, were encouraged to set a defense date 3 years in the future, and to set goals moving backward from the dissertation defense. This ideal roadmap toward PhD completion facilitates communication with mentors to ensure continuity of mutual goals. The FNS Program encourages transparency about milestones and goals between scholars and mentors to ensure a productive transition to becoming a nurse scientist. Although many of these considerations are similar for both 3-year and extended timeline PhD students, accelerated students may benefit from added assistance in early identification of strengths, weaknesses, and goal setting.

Several Scholars used Individual Development Plans (IDP) tailored to their respective schools of nursing. This tool helped organize and identify the student’s perceptions of their own strengths and weakness at the beginning of the PhD program. Pre-set goals were built into the IDP to help identify and reach milestones that were suggested in each year of the program.

There was informal consensus among scholars that the IDP was completed within the first month of their PhD studies and was then critically reviewed with their mentor in a one-to-one meeting. The IDP is a reliable tool to initiate open conversation between the mentor and the mentee and to set the stage for transparent expectations of both parties throughout the program. This tool could also be used to identify mentor-mentee mismatch early in the journey.

Mentorship

The interaction between mentor and trainee is widely recognized as one of the most important contributors to trainee success in academia (Bagaka’s et al., 2015; Hernandez et al., 2017; Jackson et al., 2003; Nersesian et al., 2019). Faculty mentors guide mentees on how to be productive researchers but also how to conduct research ethically (Rockey, 2014). Successful mentorship is associated with increased academic productivity, such as increased publication rates and grants awarded (Hafsteinsdóttir et al., 2017; Jackevicius et al., 2014).

The compressed timeframe may be challenging to the mentorship relationship. All involved have greater pressure to establish overall rapport and an effective working relationship quickly and efficiently. Overall, there is less time and opportunity to negotiate working

styles while academic goals are speedily being identified at the intersection of an accelerated PhD training experience. Schools who participated in the FNS Program were committed to identifying mentors for students who were also committed to the timeframe and to avail themselves to meet student needs on an accelerated basis. Over time, students learned that changing mentors provided by the school or identifying outside mentors was critical to their sustained success.

A study of the RWJF Nurse Faculty Scholars program found the greatest challenge to working with mentors was their accessibility (McBride et al., 2017). A nursing program's facilitation of a strong mentor-mentee match and availability of the faculty mentor cannot be overemphasized. A qualitative study of mentorship of junior faculty members in academic nursing identified several key indicators of mentor effectiveness that are applicable to pre-PhD students: open communication, mutual trust and mutual benefit, consistently nurturing the evolving relationship, providing structure, and helping the mentee to stay focused (Swanson et al., 2017).

Mentor-mentee match is arguably even more important under the unique demands of 3-year PhD programs given many of the issues previously discussed. Students should do their research and interview multiple potential faculty mentors before applying or accepting a position in a PhD program. Programs should empower student choice, facilitating exposure to a range of potential mentors and providing a provisional period for determining mentor-mentee fit accompanied by nonpunitive changing of mentors if necessary. Students and potential mentors should be transparent about working styles and mutual expectations. Ideally, the selected mentor will have an active program of research that the student may advance as part of their dissertation (Marsh et al., 2015). However, if the student intends to pursue their own program of research, it is important that the mentor be committed to seeing the student through program completion within the requisite 3-year time frame.

Interdisciplinary mentoring across scientific disciplines is being actively promoted at the National Institutes of Health (Guise et al., 2012). Forming an interdisciplinary mentorship team is a key strategy to gain diverse perspectives on research approaches and career development. Choosing an interdisciplinary mentor was a requirement of the FNS Program because research is increasingly performed in a "team science" framework (Behar-Horenstein & Prikhidko, 2017). PhD mentees' acquisition of mentors outside the nursing field can alleviate the burden on their primary mentor, enrich their research inquiry with a new point of view, and possibly generate innovative research collaborations. Having a mentorship network can be especially helpful if one mentor is a poor match (McBride et al., 2017). In the case of FNS Scholars, interdisciplinary mentoring sought out by students provided additional insights and support to achieving a dissertation that was broadly effective and introduced interdisciplinary partnerships postdoctoral. Partnerships were individually negotiated by students with mentors who were able to commit to the accelerated timeline. The multiple perspectives gleaned through interdisciplinary mentorship also assured scientific integrity in the context of the program by eliciting a broad base of expertise. For example, it was helpful to some scholars to attend university-wide events that fostered open communication between different departments. One such university event was held in conjunction with a Women in Science (Entrekin, 2018) conference. This event

provided undergraduate and graduate students, as well as junior faculty, the opportunity to have one-to-one meetings with women throughout the university who were actively advancing science in their school roles.

Some of the challenges for faculty mentoring PhD students include time constraints and managing already heavy workloads (Anderson et al., 2019). Mentors and mentees should negotiate, tailor, and formalize their expectations to make the most of their time together. Ideal mentorship activities should focus on high-value skills the student could not receive elsewhere, such as discussing research concerns, developing career plans, and providing feedback on program progress (Nersesian et al., 2019). Scholars in this program were encouraged to communicate mentor challenges to the national program development office for assistance, to troubleshoot with mentors and schools through negotiation techniques, to leverage leadership skills to make progress in difficult situations, and to make learning needs explicit to mentors throughout the relationship. Having the support of a national program staff was critical to the well-being and productivity of scholars across a host of PhD programs and universities.

Data Collection Approaches

Primary data collection has been a hallmark of traditional PhD programs, but this belief is changing with increased availability of new and larger databases and the growing field of data science. Even so, there is still discussion and controversy in nursing PhD programs regarding the preference for primary data collection. Today, considerable variability exists between nursing PhD programs in terms of structure and characteristics (Ellenbecker et al., 2017). This extends to recommended dissertation approaches: primary versus secondary research. Both approaches have advantages and disadvantages with distinct implications for a 3-year program (Table 1).

Primary research offers unique experiential learning for students, including independent study design, engaging with participants, navigating the implementation process, and managing data collection (Table 2). It may also provide students with opportunities to manage research teams and to hone self-direction skills essential for a smooth transition into early-career roles (Ellenbecker et al., 2017). Although sometimes advised it could not be done, students in the FNS Program successfully completed primary research within a 3-year timeframe when supported by dedicated mentorship and research team initiative. This experience may accelerate career trajectories, providing a solid foundation for publications and further grantsmanship.

Primary research also poses significant challenges. Mentors must allocate additional time and availability to support students conducting primary research in a 3-year program. A preestablished connection to the targeted population (through faculty or student) is also vital, and the unpredictable nature of grant funding and recruitment present additional barriers. Although primary research is feasible in some situations, it is not an ideal option for every student.

Secondary data analyses have gained popularity recently due to pragmatic access to data collected and archived globally (Johnston, 2017). Students may be able to either investigate

new research questions using a mentor's existing dataset or use a high-quality dataset readily available for little or no cost, presenting opportunities for students who have solid ideas but lack funding (Johnston, 2017). Because secondary studies often require nominal fiscal resources, smaller funding options are a viable option, particularly for students in 3-year PhD programs who may have less time for grant writing opportunities. Finally, there may be increased flexibility in mentor selection, and the complexities of conducting primary research will be avoided.

Secondary analyses pose substantial advantages for students in a 3-year program with regards to time and cost, as well as, decreased risk of unanticipated delays affecting study progression and, ultimately, degree obtainment (Johnston, 2017). Secondary analyses also provide a breadth of experiential learning opportunities including advanced statistical and data management skills among others (Table 2). However, there are also disadvantages to secondary data analysis. A potential mismatch between dataset and student inquiry may result where extant data are not able to answer an investigator's primary research question (Doolan & Froelicher, 2009). Furthermore, secondary data suffer from data collection issues and design flaws in the parent study (Chen et al., 2013), which may not be easily reconciled. Creation of a detailed, individualized program timeframe is useful for early decision-making regarding primary versus secondary research, and the resulting effects on program experiences, course selection, and ability to balance time constraints within 3 years.

Methodological Considerations

One of the first lessons a researcher learns is that the question drives the methodology. It may seem that a 3-year program would limit the methods used and limit the possible research questions. For example, some may assume quantitative studies, particularly with secondary analysis, may easily be accomplished in the 3-year timeframe, but qualitative and mixed-methods studies would be infeasible. However, FNS scholars have achieved completion of rigorous quantitative, qualitative, and mixed methods studies within the allotted timeframe.

There are some considerations to keep in mind in the 3-year context. Qualitative research involves an intensive, and often iterative, study of a given phenomenon. Although some qualitative methods may not be user-friendly in the shortened time frame (e.g., ethnography, grounded theory), a rigorous qualitative study is manageable. Qualitative research depends on rich data rather than a specific sample size (O'Reilly & Parker, 2013). Therefore, a strong recruitment strategy is critical. Flexibility in data collection is required as initial plans may not play out as anticipated. For instance, one FNS scholar initially planned to recruit through indirect methods in offices frequented by the target population. When this failed, direct recruitment, including walking neighborhoods, met with success. Another challenge to qualitative studies is the time intensity of analysis. Again, balancing the quantity and quality of the data is critical. With rich data, fewer interviews are needed. Focus groups are one way to collect a large amount of data at one time if appropriate for the research question. Although taking advanced methodology courses is imperative for all nursing PhD scholars, seeking out qualitative analysis and mixed-methods expertise will also greatly benefit scholars pursuing these methodologies.

Mixed methods research requires the use of qualitative and quantitative methods as well as the integration of findings from the two methods into one study (Creswell & Clark, 2018). Because nurse scholars are required to complete both methods concurrently or longitudinally, they may be discouraged from conducting such a study during a 3-year program. Nonetheless, if students possess firm grounding in both scientific methods as well as respective analytical processes and a strong mentor, the completion of rigorous mixed methods studies can be achieved. To gain a solid foundation, students first need to complete mixed methods course work. Additionally, considering the challenges inherent to managing two recruitment phases, data collection, and analyses, the timely completion of a mixed-methods study relies on strong partnerships with stakeholders from within academia and the research site.

From the academic side, the chairperson and members of the dissertation committee must support students' learning and assist in anticipating barriers throughout data collection, analysis, and writing phases (Holloway & Alexandre, 2012; Oscar & Hilary, 2017). Most importantly, scholars should invite both scholarly idealists and pragmatists to join their committees to ensure actionable feedback needed to achieve milestones in accordance with the dissertation timeframe. Many scholars have found it critical to select topics that align with pressing, real-world problems for stakeholders at research sites while asking a feasible research question (Holloway & Alexandre, 2012). This strategy may help stakeholders feel invested to study outcomes, bolstering their commitment to the student to achieve study aims.

Multiple Personal and Professional Loyalties

Studies cite multiple barriers preventing nurses from committing to and completing PhD programs (Fang et al., 2016). These responsibilities often force the student to prioritize competing demands. This is referred to as "multiple loyalties." One study found nursing PhD students often did not fully appreciate the time commitment of the program, as 72.2% of students worked full-time and 62.3% attended school full-time (Wheeler & Eichelberger, 2017). Balancing school, work, and life is an essential consideration for anyone pursuing a PhD in 3 years (Bai et al., 2018; Peternelj-Taylor, 2017; Salani et al., 2016; Stanfill et al., 2019; Wheeler & Eichelberger, 2017).

Nurses tend to enter the workforce through clinical practice prior to pursuing graduate education, and often obtain a Master's degree prior to pursing a PhD (IOM, 2011). Accordingly, nurse scientists tend to graduate from PhD programs later in life (Dracup et al., 2009). While scholars have noted this timeline leaves fewer working years to contribute to nursing knowledge (Dracup et al., 2009), it also highlights the multiple loyalties students might face.

More than half of one sample of nursing PhD students had at least one child during their studies (Bai et al., 2018). Moreover, students may be responsible for caring for aging parents or loved ones. To nurture relationships, spouses or significant others also need attention from the PhD students. One of the most challenging barriers to overcome in balancing multiple loyalties is employment. Many times, financial responsibilities necessitate employment, including full-time work as faculty. Also, many nurses may need to continue clinical

practice as required for professional licensure (Andreassen & Christensen, 2018). Flexible scheduling, release time, or agreed upon time off would aid students in maintaining balance of multiple loyalties (Wheeler & Eichelberger, 2017).

Efficiency alone will not address these competing time demands. Too many responsibilities can create an environment where both work quality and relationships suffer (Peternelj-Taylor, 2017). Although some nursing PhD programs are offered primarily online (Wheeler & Eichelberger, 2017), the amount of time needed to complete coursework and the possibility of synchronous meetings with faculty and mentors demand ample student schedule availability even in online programs. Nursing PhD programs often require presentations at professional meetings that necessitate time for preparation and travel away from home and work. Finally, student time is needed to develop grant writing and manuscript development skills. Publications are considered to be indicative of success in academia; therefore, many nursing PhD programs expect students to publish before graduation, requiring time to write, collaborate with coauthors, edit, and submit to peer-reviewed journals.

Overall, attrition rates for doctoral programs are approximately 40% to 60 % (Beck, 2017; Council of Graduate Schools, 2008). Given that the effect of condensing a nursing PhD program into 3 years is unknown, students must undertake strategies to successfully balance multiple personal and professional loyalties. A pre-immersion course containing modules for success is one proposed method to address attrition and improve success (Salani et al., 2016). Organization is vital to meet deadlines. Using calendars and to-do lists helps to keep activities and requirements organized (Peternelj-Taylor, 2017). Self-care activities are also needed to minimize burnout and exhaustion. Wellness activities, such as adequate sleep, diet, exercise, and mindfulness, aid in decreasing stress and promoting health (Salani et al., 2016). Schools of nursing should make these resources available to students, partnering with the university at-large or local wellness businesses to offer these benefits to students at low or no cost.

Personal motivations and goals should be kept at the forefront in considering a PhD program and examined in the context of commitments to personal loyalties, clinical practice, and self-care (Wheeler & Eichelberger, 2017). Suggestions include speaking with potential faculty mentors from multiple nursing PhD programs prior to application to ensure a good match. PhD program directors should share with students the availability of scholarship support, including a stipend. It may be beneficial for students beginning a nursing PhD program to eliminate extraneous loyalties prior to beginning the program, pausing activities not directly aligned with academic and career goals.

ADDITIONAL RECOMMENDATIONS AND IMPLICATIONS

A 3-year timeframe for nursing PhD students represents one potential avenue to address the shortage of nursing faculty and researchers but clearly requires particular considerations. To that end, several recommendations have been integrated throughout this article. In addition, this group of FNS Scholars suggest that schools interested in facilitating a 3-year option

consider practical strategies to address the feasibility of the completion timeframe at their institutions (Table 3).

The FNS Program provides substantial support in anticipation of, throughout, and after the PhD program that allows for consistent and multidimensional personal and professional development for the nurse scientist. In addition to the boot camp previously discussed, the RWJF held annual scientific meetings for scholars with themes related to policy and leadership for a myriad of professional growth opportunities. These meetings allowed for roundtable style feedback on evolving dissertation research, ongoing networking with faculty mentors and national cohorts of scholars, continuing education related to teaching, statistics, conference presentation techniques, innovation, and visits to esteemed health care organizations for scholarly enrichment. In addition, throughout the 3-year timeframe, the RWJF funding ensured living stipend provisions for all scholars without the requirement for research or teaching assistantships, allowing scholars to focus the entirety of their energy and resources on scientific and leadership endeavors. Although not recommended by the FNS Program, some scholars continued to work in a clinical capacity for different reasons. Each scholar worked a different number of hours, but most held per diem positions, which equated to approximately 2 to 3 shifts (8 or 12 hours each) in a 6-week timeframe. Some scholars did work more than their institutional requirements. Many scholars had family responsibilities, worked clinically, met and exceeded the expectations of their program, and finished the 3-year PhD successfully. As long as the scholar is motivated and has support from their mentor, this journey can be completed in 3 years.

Finally, a small number of scholars each year are eligible to apply for the highly competitive RWJF Postdoctoral Fellowship Grant to support them in building a record of funding, conducting research, and pursuing additional training postdoctoral.

Schools of nursing should continue to partner with outside partners like RWJF to obtain additional funding streams to support nursing PhD education. A myriad of strategies for raising funds to support a 3-year PhD curriculum have been successful (Fontaine & Dracup, 2007; Starck, 2015). Schools must create a reliable interpersonal and professional infrastructure for students. Eliciting feedback and input from graduating students and graduates in early career phases may provide crucial input on how 3-year programs have affected their academic progression and career success. Studies are needed that elicit the experience of mentors, student mentees, proximal faculty and administrative leaders from schools employing a 3-year model. Building the body of literature on this subject is essential for filling a critical knowledge gap and determining best practices in nursing PhD education options moving forward.

At an October 2019 summit organized by the University of Pennsylvania School of Nursing, Reenvisioning Research Focused PhD Programs of the Future, 77 participants from 41 academic, philanthropic, and government institutions met to discuss how PhD programs needed to be reenvisioned to meet the needs of the public (Fairman et al., 2021; Villarruel et al., 2021). There was a generalized feeling that PhD program curricula and format had failed to keep up with changes in science, and that program innovations, such as the 3-year PhD program, had not received adequate evaluation. At the time of the 2019 University of

Pennsylvania Summit, the AACN (2010) report, *The Research-Focused Doctoral Program in Nursing: Pathways to Excellence*, was more than 10-years-old; although in theory it supported accelerated PhD programs, it also suggested a close watch on the scholars who had previously graduated to determine career outcomes. In keeping with the aim of this article, additional scholarly dialogue from the graduates of 3-year programs is needed to inform next steps and contribute to future science and program adaptation.

CONCLUSION

More and more PhD education programs are moving to 3-year completion trajectories, but very few have put evaluation plans into place or even constructed the benchmarks that define success into place that will help identify the critical components needed for program success. There are several foundational considerations schools should use to determine their readiness for a 3-year PhD format (e.g., do they have the resources, faculty able to mentor, and faculty who support this model?); which students should be encouraged to enter this type of program; and how can students work with mentors to create the best individualized plan. Our cohort was diverse on several fronts; we were all successful in the accelerated PhD program. Many of the Scholars hailed from a broad range of individual, cultural, and professional backgrounds, had varying family responsibilities, and were in different stages of their nursing careers when the PhD journey began, but there was one trait that we all had in common: perseverance. The transition to an accelerated PhD program should be implemented with care. The IDP tool is a good instrument that opens lines of communication between mentors and mentees to ensure the common goal of completing the PhD program in 3 years.

Transitioning to a 3-year PhD program is difficult and should be more substantive than compressing a 4- or 5-year program into a 3-year schedule. A major strategic revisioning of program purpose, content, and expected outcomes are needed, as is an almost re-socialization of faculty in terms of student mentorship and situating the student for their postdoctoral lives and careers (Fairman et al., 2021). For example, one university restructured their entire PhD program before they applied to the FNS Program to ensure success of all scholars. Not only were FNS scholars expected to finish in 3 years, it was the expectation of all PhD students to complete the program in the same time frame.

The recommendations included here are meant to create a foundation for understanding what constitutes “success” for both the program and the student, as well as parameters for establishing program evaluations. This work is desperately needed to ensure a sustainable disciplinary direction and to provide the public with nurse scientists who will be able to improve the nation’s health, inform health policy decisions, and lead the profession to address responses to pandemics and other health crises.

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TABLE 1

Advantages and Disadvantages in Using Primary or Secondary Research Methods in a 3-Year Nursing PhD Program

	Primary Research	Secondary Research
Advantages	Selection/development of measures Flexibility with research question	Time, resource, and cost-effective Mentor flexibility Exempt or expedited Institutional Review Board status
Disadvantages	Duration of project Funding requirements Environmental stability (global) Logistical challenges Significant mentor support required Recruitment challenges May limit program flexibility	No control over data collection procedures Primary data collected for alternate research question Datasets may lack key variables Study-specific nuances may be unknown

TABLE 2

Experiential Learning Opportunities with Primary, Secondary and Shared Research Methods in a 3-Year Nursing PhD Program

Primary Research	Secondary Research	Shared
Research team Measurement Protocol development Full Institutional Review Board application Consent process Intervention delivery Data collection	Data harmonization Big data exposure Advanced statistical analysis	Networking Grantsmanship Data management

TABLE 3

Strategies for Schools of Nursing to Address Feasibility of a 3-Year PhD Model: Recommendations from the RWJF Future of Nursing Scholars

Strategy	Description
Prioritize a match between prospective PhD students and current faculty's existing programs of research	Prospective nursing PhD students should have comprehensive conversations with faculty at multiple institutions regarding the research fit, how potential mentors can support their research interests and goals, and a realistic plan for a 3-year timeframe
Ensure effective mentorship	A 3-year timeframe requires a commitment from the student, the mentor, and school of nursing Schools looking to implement a 3-year plan should provide additional training for faculty to support student success Offices of research housed within nursing schools can be leveraged to support nursing PhD students in identifying and accessing existing datasets relevant to their interest For students collecting primary data, mentors should help students realistically weigh the advantages and challenges of the 3-year timeframe Students and mentors be proactive in identifying potential hurdles the research team may encounter in the data collection process (e.g., recruitment) and prepare contingency plans that ensure students can collect and analyze data Prospective faculty mentors should critically appraise their ability to balance mentorship of the nursing PhD student with their current workload. Consider answering the following questions: Can I meet with a student weekly for a 1-hour duration? How many hours per week do I have available to constructively critique my student's work? What is my expected turn-around time for submitting feedback to a student? Student and faculty mentor should set clear goals and expectations for the relationship
Facilitate peer mentorship programs	Schools of nursing can create a network of support and mentorship by connecting different cohorts of students and former nursing PhD students who have completed their studies within a 3-year timeframe Former graduates and current students are important sources of human capital and can share a student perspective on different challenges during the program Peer mentorship programs can provide a forum for nursing PhD students to share best practices and help new students acclimate to the demands of the doctoral program
Support learning and research environments that foster interdisciplinary collaboration	Nursing PhD students should be encouraged to seek out interdisciplinary committee members to foster collaborative research Mentors can help students forge new partnerships between different schools and programs of research to support a robust scholarly approach
Provide logistical support for research	Students on a 3-year timeframe need support to complete their studies including IRB training and guidance, data analysis and management assistance, recruitment strategies, ongoing research consultation, and research dissemination support
Ensure ongoing writing support	Transitioning into scientific writing is a strenuous process and all students should be encouraged to use university writing centers early in the nursing PhD program Students should engage external, interdisciplinary editors available through their school of nursing and university to obtain feedback on writing projects Students who may require additional writing support, including writing in English when English is not a scholar's first or primary language or students matriculating directly from a baccalaureate degree into the doctoral program, should be identified for support early in the nursing PhD program Schools can facilitate targeted and discipline-specific writing groups to help to create accountability and consistency for nursing PhD students to accelerate student growth and success as an academic writer. For example, students in the same year of the program can create groups of 3 to 4 students to each develop their own manuscript
Develop a curriculum that supports a 3-year timeframe while providing the same depth and rigor of education as traditionally longer programs	As most nurses pursuing a PhD experience competing loyalties, curriculum plans should support scheduling flexibility as much as possible Clear curricular options that support 3-year timeframes should be made clear and accessible to all students from the onset of the program for effective planning
Bolster funding opportunities to allow nursing PhD students to shift their focus from clinical responsibilities toward completing their dissertation within 3 years	Partnerships with local hospitals and health systems that specifically support nursing doctoral students pursuing the 3-year timeframe can strengthen community engaged research and enhance flexible scheduling and time off. These programs would ease financial burden Scholars often face to ensure sufficient time and dedication is focused on coursework and completing research

Strategy	Description
Support student wellness	Completing a PhD program within 3 years is incredibly difficult and can be further compounded by clinical work and family responsibilities. Schools of nursing should make mental health services easily accessible to nursing doctoral students Mentors should be tasked with role-modeling healthy work behaviors, helping students to create a stable foundation of personal wellness for a career as academic researcher and nurse educator
Help students identify opportunities after graduation	Schools of nursing should consider how the 3-year timeframe may impact student choices after graduation. For nursing doctoral students on the 3-year timeframe who wish to pursue research-intensive careers, scholars are well prepared for postdoctoral positions where they will have the opportunity to focus on publications, securing additional grant funding, and gaining additional research skills Other options for students after graduation include teaching positions, administrative leadership positions, and work in health policy, among others

Note. IRB = Institutional Review Board; RWJF = Robert Wood Johnson Foundation.