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Royal Commission into Aged Care Quality and Safety

ANNEXURE A

Please send your completed statement via email to ACRCsolicitor@royalcommission.gov.au

Based on your knowledge and experience, please address the below in your statement. If you are unable to answer or address any question, explain why this is so.

1. State:

    a. Charlene Harrington
    b. University of California San Francisco
    c. Professor Emerita
    d. Registered Nurse, Sociologist, and Gerontologist
    e. See attached CV
    f. 40 years in teaching and research on long term care
    g. Research studies of nursing homes in 6 countries including the US, Canada, Norway, Germany, United Kingdom, and Sweden

2. Describe the relationship between staffing levels in residential aged care (or nursing homes) and care quality outcomes.

On the whole, many studies document a strong positive impact of nurse staffing (particularly registered nurses (RNs) but also the total nursing including licensed vocational or practical nurses (LVNs/LPNs) and certified nursing assistants (CNAs) on both process and outcome measures of nursing home quality. Higher RN staffing levels are associated with better resident care quality in terms of: fewer pressure ulcers; lower restraint use, decreased infections; lower pain; improved ADL independence; less weight loss, dehydration, and insufficient morning care; less improper and overuse of antipsychotics; and lower mortality rates.[1-16] There is also a strong relationship between higher nurse staffing levels in nursing homes and reduced emergency room use and rehospitalizations from nursing homes.[17-19] The strongest relationships are found between higher nurse staffing levels and lower deficiencies (violations of federal regulations) for poor quality issued by state surveyors.[8,20-22]

3. Is the level of nursing care is a central factor in care quality outcomes in residential aged care facilities (or nursing homes)? If so, why?

Nurse staffing levels are the most important factor that determines the quality of care provided by nursing homes. Insufficient staffing levels negatively impacts all residents in a nursing home on a systemic basis. Numerous studies of nursing home operations reveal an indisputable relationship between the number of nursing home staff who provide direct care to residents on a daily basis and the quality of care and quality of life of residents. The dangers of understaffing have

been common knowledge in the US nursing home industry since the 1980s and culminated with the findings from the study of Appropriateness of Minimum Nurse Staffing Ratios published by Centers for Medicare & Medicaid Services.[20] There have been many research papers showing the link between staffing levels and quality of care.[1-22]

Missed or omitted care has been found to be associated with adverse events including: pressure ulcers, medication errors, new infections, and IVs running dry or leaking.[23-24] Staffing levels, not surprisingly, predict missed nursing care and can explain the relationship between staffing levels and patient outcomes.[23-25] A recent survey of RNs in nursing homes found that 72 percent reported missing one or more necessary care tasks on their last shift due to lack of time or resources.[26] The missed care often included care planning, comforting/talking with residents, providing adequate resident surveillance, and resident/family teaching. Missed care was found to be related to high levels of RNs burnout and job dissatisfaction.[26] High nurse turnover rates are also related to inadequate staffing levels and poor quality. [6,27]

4. What measures are most effective to:

a. achieve appropriate staffing levels of the aged care workforce in residential aged care facilities (or nursing homes)

b. impact on the supply and retention of the aged care workforce

c. improve the skills, knowledge and ability of the aged care workforce to deliver quality and safe direct care

d. improve the skills, knowledge and ability of the aged care workforce to indirectly deliver quality and safe care indirect services?

The most important policy measure for ensuring appropriate staffing levels is to adopt a regulatory requirement that establishes a minimum staffing level. Having adequate staffing levels in nursing homes improves the quality of care and quality of life for nursing home residents and protects their health and safety.[28]

The is a strong interactive relationship between staffing levels and the supply and retention of nurses in nursing homes.[6] Nursing homes that have low staffing levels have heavy workload requirements which in turn are an important factor related to high staff turnover rates.[27] Moreover, the low wages in benefits of nurses (RNs, LPNs, and CNAs) are also an important factor that increase the high staffing turnover rates in US nursing homes. In the US, nursing turnover rates often range from 40 to 100 percent within one year. With high turnover rates, then the nursing staff often are unable to improve their skills, knowledge, and ability to care for residents. Adequate staffing levels appropriate to meet the needs of nursing residents are fundamental to stabilizing nursing staff turnover and to improving the training, skills and ability of the staff.[28]

5. Are there benefits in implementing minimum staffing standards? If so, please describe.

Numerous studies have consistently shown that higher state minimum staffing levels (beyond the federal minimum requirements) have had significant positive effects on staffing levels and quality outcomes.[8,15,29-34] In these studies, higher state staffing standards resulted in higher average staffing levels and improved quality. In addition, higher state minimum RN and total staffing standards have been shown to have a stronger effect on nursing home staffing levels than higher Medicaid payment rates.[35] Overall, these studies show that adopting higher staffing standards has a significant positive impact on nursing home quality.

6. What are the risks in implementing minimum staffing levels in residential aged care facilities (or nursing homes)?

To be effective, the minimum staffing standards need to specify the minimum levels for

different types of staff -- RNs, LVNs, and CNAs. Since RNs are the most expensive staff, the standards need to specify the minimum RN hours per resident day. If only total hours are mandated, nursing homes are likely to hire the least expensive CNAs to provide care but research shows that RN hours are the strongest predictor of high quality of care. Moreover, if the minimum staffing standards that are adopted are below a level that is known to cause harm and jeopardy based on research studies, then the minimum level could result in nursing homes having staffing levels that are too low.

7. In 2001, the U.S. Centers for Medicare and Medicaid Services (USCMS) released a study which established the importance of having a minimum of 4.1 nursing hours per resident per day to meet the federal quality standards (USCMS study).

A CMS study in 2001 established the importance of having a minimum of 0.75 registered nurse (RN) hours per resident day (hprd), 0.55 licensed nurse (LVN/LPN) hprd, and 2.8 (to 3.0) certified nursing assistant (CNA) hprd, for a total of 4.1 nursing hprd to meet federal quality standards.[20] As part of this study, a simulation model of direct care workers (CNAs) established the minimum number of staff necessary to provide five basic aspects of daily care in a facility with different levels of resident acuity. The results found that the minimum threshold for CNA staffing is 2.8 hprd to ensure consistent, timely care to residents.[20] This translates into 1 CNA for 7 residents on the day and evening shifts and 1 CNA to 11 residents at night.

This minimum threshold level was later confirmed in an observational study of nursing home staffing by Schnelle et al.[11] and in analysis by Abt Associates for the CMS Nursing Home Compare website. Across the entire distribution of staffing levels, there is a strong association between higher total staffing levels and better outcomes as defined by lower survey deficiencies and improved resident quality measures (e.g. pressure ulcers).

Some experts have recommended higher minimum staffing standards than the CMS 2001 report (a total of 4.55 hprd) to improve the quality of nursing home care, with adjustments upward for higher resident acuity or case-mix.[36] A number of organizations have endorsed the minimum of 4.1 hprd standard, have recommended that at least 30 percent of total nursing care hours should be provided by licensed nurses, and have recommended that RNs should be on duty 24 hours per day.[37-39]

a. What impact has the USCMS study had since 2001?

The CMS 2001 study recommended minimum staffing to protect the health and safety of residents but did not require nursing homes home to meet those levels. The CMS study has been the gold standard study on minimum staffing levels since 2001. While some homes have improved their staffing levels, especially their RN staffing levels, other nursing homes have dangerously low staffing.[28,40]

b. Has legislation been passed to implement minimum nursing standards at a federal level?

US federal regulations specify that each nursing home must provide nursing services to meet the care needs of its residents:[41]

> "The facility must have sufficient nursing staff with the appropriate competencies and skills sets to provide nursing and related services to assure resident safety and attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident, as determined by resident assessments and individual plans of care and considering the number, acuity and diagnoses of the facility's resident population in accordance with the facility assessment…" (See 42 C.F.R. § 483.70(e).[42]

The facility must have sufficient numbers of RNs, licensed nurses and CNAs on a 24–hour basis to provide nursing care to all residents including a charge nurse on each shift, a registered

nurse for at least 8 consecutive hours a day, 7 days a week, and a designated RN to serve as the director of nursing on a full time basis, unless they have a CMS waiver.[42] The director of nursing may serve as a charge nurse only when the facility has an average daily occupancy of 60 or fewer residents (§483.35(b)(3)).[42] Nursing homes are required to post daily nurse staffing data on the total number and type of staff and the actual hours worked by nursing staff by shift. In addition, facilities must ensure that nursing staff have the competency and skill sets to care for residents.[42]

A majority of states have established their own minimum staffing requirements for nursing homes.[43] For example, California law requires all skilled nursing homes to provide at least 3.5 nursing hours per resident day (hprd), although some waivers are allowed (California Health & Safety Code §1276.5.) Unfortunately, all the state standards are lower than the levels recommended by experts. Facilities that meet state minimum standards do not necessarily employ adequate staff to meet the federal law which requires meeting the needs of each resident in the nursing home at all times.

c. The USCMS study is based on research conducted in 2001. Have the acuity levels of residential aged care residents has increased over time? If so, are the findings in the USCMS study still valid?

Although there is evidence that nursing home resident acuity levels have increased since 2001, the CMS study was only addressing the minimum staffing levels for the lower acuity levels. Therefore, the CMS 2001 recommendations are still appropriate for the current minimums. Beyond the minimum levels, nursing homes need to adjust staffing levels upward for higher acuity of residents.

A recent simulation study found that a higher level of CNA staffing is needed than the minimum of 2.8 hprd reported in the CMS 2001 study. Schnelle and colleagues (2016) categorizing residents based on five activities of daily living described in the previous section, found that 2.8 CNA hrpd are needed in nursing homes for residents with the lowest workloads in order to have less that 10 percent omissions in care.[44] This converts to 1 CNA for every 7 residents on the day and evening shifts and 1 CNA to 11 residents at night. For the facilities with the heaviest resident workload, 3.6 CNA hprd are needed (1 CNA for every 5.5 residents on the day and the evening shifts and 1 CNA for every 11 residents on the night shift).[44]

8. Does the Centers for Medicare and Medicaid Services' (CMS) Medicare Nursing Home Compare Five-Star Rating System improve aged care staffing levels in residential aged care facilities (or nursing homes)? If yes, how?

The CMS Medicare nursing home compare website was initiated in 2008 and it has had a positive impact on encouraging nursing homes to increase their staffing levels. Since that time, nursing homes are given a separate rating for both their RN staffing levels and their total staffing levels as well as a combined rating for RN and total staffing hours. Nursing home compare has documented the increase in staffing levels over time since 2008 in many nursing homes.

Between 2008 until 2018, staffing data were self-reported by nursing homes at the time of their annual survey and these data were used for the Medicare nursing home compare website. These data were not considered accurate because they were not validated and facilities often increased staffing just prior to the annual survey in order to improve their survey results and to inflate their staffing ratings on Medicare Nursing Home Compare. Because of this problem, the Obamacare legislation passed in 2010 required all nursing homes to report staffing based on their payroll – called payroll based journal data (PBJ).

Beginning in 2017, nursing homes were required to submit daily staffing data on a quarterly basis to CMS on the Payroll-Based Journal (PBJ) reporting system.[45] The PBJ data for each nursing home (if submitted on a timely basis according to CMS protocols) are available on the CMS

website (data.medicare.gov) for each nursing home and were on the Medicare nursing home compare website in 2018.

After the PBJ reporting was implemented, 7 out of 10 nursing homes reported 12 percent lower staffing on average than the self-reported data to CMS. Overall, 70 percent of nursing homes reported higher total direct staffing time prior to reporting PBJ data in 2017-18.[40] According to the PBJ data, nursing home **s**taffing levels were highly variable and much lower on weekends than during the week. RN levels were 42 percent lower, LVN/LPN levels were 17 percent lower, and nurse aide levels were 9 percent lower on weekends in 2017-18.[40] Based on resident acuity, 54 percent of nursing homes did not meet the total CMS expected staffing level 80 percent of the time. About 75 percent of nursing homes almost never met the CMS expected RN staffing level based on resident acuity in 2017-18.[40] These findings show that most nursing homes are not taking resident acuity data into full account to determine sufficient staffing levels.

In 2019, based on PBJ data, the average nursing home reported total nurse staffing levels of 3.89 hprd (which included 0.68 RN hprd, 0.88 LVN/LPN hprd, and 2.33 CNA hprd including all administrative nurses).[46] These staffing levels are substantially lower than the 0.75 RN hprd, 2.8 CNA hprd, and a 4.1 total nursing hprd recommended in 2001 to prevent harm or jeopardy.[20] This shows that while progress has been made in improving staffing, there are still many nursing homes with dangerously low staffing levels because the minimum requirements have not be clear and enforced.

An important new study by Cornell, Grabowski, Norton, and Rahman, 2019, found that discharge to a higher star nursing homes led to significantly lower mortality, fewer days in the nursing home, fewer hospital readmissions, and more days at home or with home health care during the first six months post nursing home admission.[47] They concluded that the Medicare nursing home compare star ratings matter for patient outcomes. Unfortunately, the choice of nursing homes is often based on the distance of the facility from a resident's home. Individuals, hospitals and health plans should be using the star ratings in making choices of nursing homes but many individuals are unaware of the rating systems.

9. Comment on the below two studies and findings:

a. In 2015, Chen and Grabowski examined the effect of minimum care hours as required by state law or recommended by the USA Centers for Medicare and Medicaid Services (CMS) and highlighted a potential consequence of mandating minimum care hours without a skill mix requirement. In the two jurisdictions examined in the study, the regulation had the unintended consequence of lowering both the number of professional nurses relative to nurse aides, and the number of indirect care staff relative to direct care staff. However, the study also found that the staffing regulations were associated with improvements in some care quality indicators.

b. Similar unintended consequences were indicated by a 2017 study by Bowblis and Ghattas from the United States, which found that the introduction of mandated minimum nursing staffing levels in some states in the early 2000's increased staffing in the low- staffed nursing homes, but often through the employment of lower qualified and paid nurses. The study also found that nursing homes that had higher staffing levels before the introduction of regulation decreased their staffing.

As was noted in these two studies, the states that failed to ensure minimum standards for RNs saw nursing homes shift their workforce to less expensive nursing staff. It is not sufficient to set a minimum staffing standard for total nursing homes, but the minimum must also be set for RNs, total licensed nurses, and CNAs separately. The key point is that higher standards has resulted in better quality outcomes but the state standards have all be set below the levels recommended by experts.

10. What role does the market play in improving staffing standards in residential aged care facilities (or nursing homes)?

Homes with the highest profit margins have been found to have the worst quality in the US.[48] The largest for-profit chains have lower RN and total nurse staffing hours than non-profit facilities and government facilities and have more deficiencies, which is not surprising considering their low staffing and high acuity levels .[49-51] Non-profit nursing homes (compared to for-profits) have fewer 30-day hospitalizations and greater improvement in mobility, pain, and functioning. Many studies show the poor quality of for-profit companies and for-profit chains.[52]

The markets have not played a very important role because 70 percent of nursing homes are for-profit and 56 percent are chains that dominate the markets. These companies seek to keep nurse staffing at the lowest levels to maximize profits.

If the government would expand financial support to nursing homes owned and operated by government and non-profit organizations, that could expand the number of high quality nursing homes and make the market more competitive. Also greater ownership, quality, and financial transparency for nursing home companies would make the public more aware of the problems with for-profit nursing home ownership, which can in turn increase competition.

11. What measures should be introduced to regulate staffing levels in residential aged care facilities (or nursing homes)? Why?

As explained above, mandated minimum staffing standards are needed along with the requirements to increase staffing levels as resident acuity levels increase. The staffing levels of nursing homes also need to be a central part of the regulatory oversight and inspection process of nursing homes. Unfortunately, nursing homes in the US have had historically poor oversight.[53-56] Nursing homes that fail to meet the minimum staffing standards should not be allowed to operate facilities. In addition, government funds given to nursing homes for staffing should be required to be used for staffing and not diverted to administrative costs and profits.

12. How can aged care workforce supply shortages, particularly in rural and remote areas, be addressed?

Since the workforce supply is constrained because of low wages and benefits and heavy workloads in nursing homes, the best approach to address the situation is to establish minimum staffing standards. This would force nursing homes to increase wages and benefits in order to meet the regulatory requirements and would improve quality at the same time.

13. An academic article, co-authored by you, states:

> **Compelling evidence supports the need for higher U.S. minimum nurse staffing standards, adjusted for resident acuity, to ensure adequate quality of nursing home care as a necessary precondition for making other quality improvements such as in leadership, management, and training.**

Explain this statement.

As noted above, the is a strong interactive relationship between staffing levels and the supply and retention of nurses in nursing homes. Nursing homes that have low staffing levels have heavy workload requirements which in turn are an important factor related to high staff turnover rates.[6,27] Moreover, the low wages in benefits of nurses (RNs, LPNs, and CNAs) are also a factor related to high staffing turnover in US nursing homes. In the US, nursing turnover rates often range from 40 to 100 percent within one year. With high turnover rates, then the nursing staff often are unable to improve their skills, knowledge, and ability to care for

residents. Training programs must take into account the high turnover rates. Adequate staffing levels appropriate to meet the needs of nursing residents are a fundamental to stabilizing nursing staff turnover and to improving the training, skills and ability of the staff. [28] Until nursing homes have adequate staffing levels, they are unlikely to be able to stabilize the workforce sufficiently to take advantage of better training and management programs.

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