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Article

Transition from 24-Hour Shifts to Safer Work Schedules for Nurses in Latvian Healthcare: Policy Analysis and Recommendations

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Abstract

The practice of 24-hour shifts is still common in Latvian healthcare, especially in inpatient medical treatment institutions, despite evidence of its adverse effects on staff well-being, patient safety, and quality of care. This article provides an in-depth policy analysis based on international experience, the Latvian legal and institutional context, as well as the current situation in medical treatment institutions. Alternative shift patterns (8h, 12h, flexible schedule) are examined, their advantages and challenges are compared, and preconditions and policy recommendations for a safe transition are developed. The article identifies seven key factors for the successful implementation of the reform, including adapting the regulatory environment, strengthening human resources, financial support, management training, technological support, implementing pilot projects, and setting up a monitoring system. The analysis concluded that reform is needed not only to improve the organisation of work, but also as an instrument for changing values, promoting a human-centred and excellence-oriented healthcare system in Latvia.

Keywords: work schedule tolerance; nursing staff; health policy; health workforce; Latvia

1. Introduction

On the basis of the Cabinet of Ministers Order No. 1194 of 18 December 2024 On the plan Health Workforce Development Strategy 2025–2029 [1], work was initiated on the evaluation of a flexible working time organisation model in Latvian healthcare institutions that is more conducive to employee well-being, particularly in the context of nursing work.

The quality and sustainability of the healthcare system is largely based on the working conditions of the professionals employed in it, including the organisation of working time. Nurses, as a fundamental element of the healthcare system, face high physical and psycho-emotional stress on a daily basis, which is often exacerbated by long and continuous working hours, including 24-hour shifts [2–5]. Prolonged work shifts contribute to occupational burnout, disrupt work-life balance, and compromise patient safety [6–9].

In Latvia, working time organisation for medical practitioners, especially nurses, is often not based on evidence-based standards or principles of staff well-being, but on the basis of historically established traditions, due to lack of human resources and economic considerations. According to OECD data, Latvia has one of the lowest nurse densities per 1,000 population in the European Union at 4.2 nurses compared to the EU average of over 8.5, which puts excessive strain on existing staff and often necessitates working 24-hour shifts [10].

Such working time arrangements pose significant risks to physical and mental health of the staff, as well as reduce work efficiency and professional sustainability. Studies in Latvia show that more than 60% of nurses regularly work more than 12 hours and 38% say they work a 24-hour shift at least

once a month [11,12]. These data are consistent with international studies confirming that working longer than 12 hours increases the likelihood of errors in the care process, contributes to medication administration errors, and reduces patient satisfaction with the care received [13–15].

The World Health Organization (WHO), the International Labour Organization (ILO), and the European Commission have made clear recommendations on the organisation of working time in healthcare: shifts should not exceed 12 hours, there should be at least 11 hours of uninterrupted rest between shifts, and the total weekly working time should not exceed 48 hours [16,17]. These principles are followed in many EU countries, where the transition to three-shift systems or flexible modular scheduling has already taken place [18–27].

In Latvia, these principles are still not fully implemented. 24-hour shifts are still common in various healthcare sectors, such as intensive care, emergency services, admissions units, and elsewhere. Work schedules are often drawn up manually or using outdated systems, overtime records are incomplete, and remuneration often does not reflect actual workload [28–30]. Long shifts are also maintained for economic reasons by the employees themselves. Night, holiday, and weekend work is paid extra, but in order to secure a monthly income, many are forced to combine several jobs and work up to 60–70 hours per week, which significantly exceeds the legal norm [30].

In this context, the question of systemic changes in working time planning becomes relevant. This article offers a policy analysis and a well-founded justification for the need to move from 24-hour shifts to a structured, flexible three-shift system in Latvian healthcare that is protective of employee health. The article analyses the current situation, outlines the risks and benefits, summarises international experience and provides recommendations for the implementation of possible models, taking into account the Latvian context.

1. Analysis of the Situation in Latvia

The working time organisation of the Latvian healthcare system for medical staff is diverse, but it is characterised by insufficient structuring and a high dependence on long shifts, including 24-hour shifts. This practice is still widely used in several care sectors, especially emergency medicine, inpatient care, and intensive care units, despite a growing evidence base on the negative impact of this work pattern on staff health and patient safety [4–6,31].

There are currently three main models of shifts in Latvia: (1) the classic three-shift system with 8-, 10-, or 12-hour shifts, (2) a two-shift system, usually in a 12-hour format, and (3) a 16- or 24-hour shift pattern typical of emergency departments, hospital admission units, physician assistant work in the regions, and specialised care in critical units. Sometimes 24-hour shifts are maintained with the consent of employees, as they allow the workload to be concentrated in one shift, ensuring longer periods of free time and the opportunity to work additionally in other medical treatment institutions [5,30].

But in the long term, this approach poses significant risks to both staff and the quality of healthcare. Long shifts contribute to chronic fatigue, impair cognitive performance, increase the risk of occupational burnout, and affect the quality of decision-making. Latvian studies confirm the presence of these risks – in the RSU study on nurses' sustainability, more than 60% of nurses indicated that they regularly work shifts of more than 12 hours, while 38% noted that they worked 24-hour shifts at least once a month [11,12]. In addition, 70% of respondents reported symptoms of fatigue, 44% reported difficulty concentrating, and 28% reported anxiety or sleep disorders related to their work schedule.

This situation is aggravated by a serious shortage of human resources. In Latvia, there are 4.2 nurses per 1,000 population, while the European Union average is over 8.5 nurses per 1,000 population [10]. This disproportion means that existing staff have to perform more tasks, work overtime, and often take on double workloads. 24-hour shifts are therefore often not a matter of choice, but a practice dictated by necessity in times of resource scarcity.

Another major challenge is incomplete accounting and control of working time. In its 2023 report, the State Labour Inspectorate (SLI) identified significant shortcomings in the organisation of

working time in medical treatment institutions, such as work schedules often not being drawn up in accordance with the requirements of the Labour Law, overtime not being correctly accounted for, and adequate daily and weekly rest not provided [28,29].

This systemic shortcoming creates a situation where staff work long hours and intensively, but this is not properly documented or compensated. The remuneration system is based on various bonus mechanisms, which often make long shifts financially more advantageous [30]. In the long term, this practice puts a burden on both staff and the system as a whole, contributing to burnout, staff turnover, and low professional retention.

International working time limits are still not consistently respected in Latvia. WHO and ILO recommendations clearly state that a work shift should not exceed 12 hours and that there should be at least 11 hours of rest between shifts [16,17]. These conditions are not mandatory under Latvian laws and regulations, so medical treatment institutions, especially outside Riga and large university hospitals, often ignore them. This compromises the health of staff and the safety of patient care.

The situation is further complicated by the fact that some staff, such as midwives, physician assistants, and emergency medical care staff, still work on a shift system, where employees are relieved only the following day. This model has been maintained despite evidence of its adverse effects on health, sleep quality, and work performance [9,32–35].

Latvia's demographic situation and the attraction of young people to the nursing profession are also currently insufficient to ensure a full transition to a three-shift system without targeted policy implementation. The number of university graduates is only partially able to fill existing vacancies, but many young professionals choose to work abroad or in the private sector [36].

Overall, the current practice of working time organisation in Latvia is based on historical traditions, addressing staff shortage through individual sacrifice and limited regulatory framework. It does not meet today's requirements for a safe, flexible working environment oriented towards well-being. A targeted transition towards evidence-based scheduling and strategically coordinated reform at all levels of healthcare is needed.

2. Impact on Employees

Prolonged work shifts in healthcare, in particular 24-hour shifts, have a significant negative impact on the health, psycho-emotional balance, and professional performance of staff [3–9]. This impact affects several dimensions, physical and psychological exhaustion, burnout syndrome, loss of motivation, and work-life imbalance. In Latvia, where long shifts are still widely used, these risks are particularly relevant and often not adequately addressed.

The physical strain that healthcare staff face every day comes from standing, moving patients, documenting, providing care, having a lot of responsibility, and staying focused all the time. In a 24-hour work arrangement, this strain is particularly intense and prolonged, resulting in fatigue accumulation, increased risk of musculoskeletal disorders, and loss of ability to respond adequately to unexpected situations [36–38].

The psychological strain during long shifts is even more pronounced as staff are exposed to emotionally intense situations such as patient suffering, death, critical conditions, communication difficulties with relatives or colleagues, and various ethical challenges [39–42]. Prolonged working patterns without adequate support lead to symptoms of emotional exhaustion – chronic stress, feelings of helplessness, irritability, and insomnia – which are classic signs of burnout syndrome.

According to the WHO definition, burnout syndrome is the result of chronic stress in a work environment where stress is not properly managed. This manifests as emotional exhaustion, depersonalisation (distancing from work or patients), and reduced professional effectiveness [32,43]. Burnout syndrome is becoming increasingly common in Latvia. SPKC (Centre for Disease Prevention and Control) and RSU data show that approximately 50–60% of nurses report symptoms of burnout, especially in conditions of long shifts and high workload [44–46].

In addition, long shifts have a negative impact on employees' cognitive functions, concentration, decision-making quality, reaction speed, and risk assessment. Studies show that cognitive decline

begins after 8 hours of continuous work, becomes pronounced after 12 hours, and even critical after 16–24 hours [47–49]. Studies by the American Nurses Association (ANA) and other international studies show that the error rate increases by 200% after 12-hour shifts compared with 8-hour shifts [50,51].

Quality control reports in Latvian hospitals also note that the frequency of errors and incidents increases at the end of shifts, when staff are most tired. These errors include medication administration errors, documentation errors, delayed decisions, and misinterpretation of the patient's condition [52,53]. However, many errors are not recorded, especially so-called 'silent errors', which occur more frequently during night shifts and at the end of shifts.

Work-life imbalance is another major problem. During 24-hour shifts, employees are often unable to rest properly, recover, or participate in family and social life. This particularly affects women, who are more likely to take on responsibility for the household and children [54–56]. In the long term, this imbalance contributes to social isolation, relationship difficulties, depression, and reduced motivation to work in healthcare.

Eurofound studies have found that employees who experience chronic work-life imbalances are less likely to engage in professional development, change jobs more frequently, and leave the profession altogether [57]. This trend is confirmed in Latvia, with 29% of nurses in an RSU study admitting a desire to leave healthcare within the next two years [46].

Long shifts also limit opportunities for professional development, as employees do not have time to attend training, courses, conferences or engage in research. This reduces professional identity, creates routines, and reduces opportunities for career growth [58,59].

In addition, 24-hour schedules hinder teamwork development, and employees with different shift schedules rarely meet, communication becomes fragmented, and continuity of care is lost. In the long term, this can affect both the quality of care and the working environment in the team [60].

In summary, long shifts, especially 24-hour shifts, are a major threat to the health of healthcare staff, contribute to burnout, increase the risk of errors, and reduce the quality of professional life. These effects accumulate and pose a systemic risk to both employee retention in the sector and patient safety and quality of care. Policy reforms in this area are not only recommended, but also critically needed to ensure a sustainable healthcare system in Latvia.

3. Impact on Patient Safety

Patient safety is one of the key quality indicators of a healthcare system and is directly affected by the ability of healthcare staff to perform clinical activities in an accurate, timely manner and high quality. Long work shifts, especially 24-hour shifts, significantly impair this ability by causing chronic fatigue, impaired concentration, reduced reaction speed, and increased likelihood of cognitive errors [61–64].

Staff fatigue is considered one of the most important risks to patient safety. International studies show that after 17 hours of continuous wakefulness, an employee's reaction time and decision-making ability are comparable to those observed at a blood alcohol concentration of 0.05% [63]. This means that care staff who have not rested for long periods of time are acting in a similar state to someone who is intoxicated, which is unacceptable in an environment where every decision can affect lives.

Studies also confirm that the frequency of errors increases significantly after 12 hours of work, and errors are much more frequent at night and at the end of shifts [52,53,65,66]. The most common errors are:

- incorrect medication dosage or timing of administration;
- documentation errors;
- patient identification errors;
- delayed response to changes in symptoms;
- erroneous clinical decisions in critical situations [53].

Latvian medical treatment institutions often lack systematic error analysis, as many errors are not recorded, especially so-called 'silent errors' in documentation or patient assessment. Such errors are rarely investigated and originate from sources such as fatigue-related inattention and are not documented, thus preventing evidence-based improvements [53,67].

The internal quality control system of Riga East Clinical University Hospital is one of the few that tracks the origin of errors, including analysing its relationship with shift duration. According to its data, the error rate is significantly higher at the end of long shifts, especially on public holidays and at night [68].

International studies indicate that in hospitals where 12+ hour shifts are regularly used, patients are at higher risk of medication errors, infections, delayed treatment, and other adverse outcomes. For example, a 2014 Health Affairs study found that patient mortality was higher in hospitals where staff worked longer shifts [69]. A 2020 BMJ Quality & Safety study analysing more than 200 hospitals in Europe and the US confirmed that long shifts significantly worsen patient outcomes [70].

In addition to objective clinical indicators, patients' subjective assessment of the quality of care is also important. Studies show that patient satisfaction decreases when staff are overworked or fatigued [71,72]. Due to fatigue, staff are unable to react quickly enough, lose focus when talking to the patient, or make mistakes in care activities, which the patient interprets as negligence. This lowers trust in the medical treatment institution, which can lead to complaints and, in the long term, a reduction in patient flow.

The EHO and the ILO make it clear that patient safety is directly related to the working conditions of care staff [70,73]. WHO recommends:

- limiting the duration of a shift to a maximum of 12 hours;
- at least 11 hours of rest between shifts;
- training staff on the risks of fatigue and error prevention.

EU Directive 2003/88/EC concerning certain aspects of the organisation of working time, which is also binding in Latvia, establishes the right to weekly rest and a maximum weekly working time of 48 hours, including overtime [1]. However, these norms are often not respected in healthcare in Latvia for practical reasons such as staff shortage, incomplete IT systems, or traditions.

In addition, studies show that in countries where the transition from 24-hour shifts to a structured three-shift system has already been implemented, patient safety is significantly improved. Experience in Sweden shows that the number of errors in care decreased by 30% in the three years following the transition to 8-hour shifts [19]. Similar results have been observed in Norway and Germany, where long shifts are banned or strictly regulated [18,21].

Overall, the quality of working time management is one of the key determinants of patient safety. Prolonged changes significantly increase the risk of errors, delay clinical response, and create distrust in patients. In a healthcare system where quality and safety are critically important, maintaining a pattern of long shifts is a serious systemic threat.

4. International Experience

International experience clearly shows that 24-hour shifts in healthcare pose significant risks to both employees and patients, which is why many countries have already made the transition to more structured and safer shift systems. In these countries, three-shift models with 8 or 12-hour shifts and flexible schedules tailored to the needs of the staff and the specific nature of the institutions prevail [6,15,18–27,74].

Nordic countries such as Norway, Sweden, Denmark, and Finland are pioneers in introducing flexible, safe schedules that are more conducive to employee well-being. 24-hour shifts are no longer used in these countries. Three-shift systems with 8-hour shifts or flexible 12-hour schedules are predominant, closely monitored and structured to ensure at least 11 hours of rest between shifts [18–20]. The results show a significant reduction in burnout and an increase in patient satisfaction.

Germany mainly uses shift systems of 8 to 12 hours. Since 2003, the legislation in force clearly limits the length of a shift and requires mandatory rest between shifts [21,22]. In addition, strict overtime accounting and compensation mechanisms are in place. The German example shows how regulatory support can achieve a sustainable shift system.

In France, most hospitals have switched to a 35-hour week with 7–8 hour working days. Longer shifts are only allowed in emergency situations and are carefully monitored [21,23]. In France, the focus is on staff well-being, safety culture, and continuity of care.

In the United Kingdom (UK), both classic 8-hour and 12-hour rotating shifts are used, but work schedules are often based on collective agreements with employees [21,24]. The UK is also trialling split shift models, where a shift is split in two parts, for example with a longer break in the middle of the day, allowing flexibility in staff workload.

In Canada, 12-hour shifts are prevalent, but their application is closely linked to ensuring adequate rest. In many cases, mixed schedules are used, combining 8-hour and 12-hour shifts to suit the needs of the units and staff availability [25].

In Australia and New Zealand, 8-, 10-, and 12-hour shifts are used, depending on the care sector. Compressed working weeks are also becoming popular, such as four 10-hour shifts per week, which give more days off but require a high degree of self-discipline and planning [26].

In the USA, 12-hour shifts have historically dominated, but more and more hospitals are moving towards more flexible and dynamic schedules, using technological solutions and data analytics [27]. For example, healthcare organisation Kaiser Permanente has transitioned to hybrid shift models that combine safety, employee choice, and efficiency.

International evidence shows that the transition from a 24-hour to a three-shift system has several benefits:

- up to 30% reduction in burnout [19,20],
- 25–35% reduction in error rate [69,74],
- increased patient satisfaction and a more positive perception of the quality of care [72],
- reduced staff turnover and greater retention in the sector [75].

In Sweden, within three years of completely abandoning 24-hour shifts, the number of recorded errors in care decreased by 30%, the number of sick leaves by 20%, and employee satisfaction with work increased by 35% [19].

The Nordic models are particularly notable for the role of social partnership and collective agreements, which ensure that work schedules are based not only on patient needs but also on considerations of employee well-being. This practice promotes long-term trust in the system and employee loyalty.

The Latvian healthcare system can learn from these examples by adapting proven models to the local context. While it is not possible to mechanically adopt another country's practices, a structured approach with:

- regulatory changes,
- implementing pilot projects,
- personalised scheduling,
- the development of collective agreements,

could significantly improve the working environment and the quality of care.

5. Possible Alternative Shift Models in Latvia

The transition from 24-hour shifts to safer and more sustainable work schedules requires not only political will and regulatory solutions, but also a clear understanding of practically feasible models adapted to the specifics of the Latvian healthcare system. International experience shows that several alternative systems can be applied depending on the profile of the unit, the availability of resources, and the staff structure [18–27]. Below are four possible shift models that could replace 24-hour shifts in Latvia.

1. 12-Hour Shift Model (Day/Night/Rest)

This is one of the most common models used during the transition period after abandoning 24-hour shifts. Typically, it looks like a three-day cycle: day shift – night shift – rest. The model is relatively easy to implement, has low complexity, and provides a balance between working time and leisure time.

Benefits:

- Simple to plan and implement.
- Ensures regular rest between shifts.
- Less intensive than 24-hour shifts, but still retains some flexibility.

Challenges:

- Significant fatigue after night shifts is still possible.
- More staff are needed to cover the entire care process.

2. Maximum Shift Duration – 16 Hours or Less

By introducing a regulation that sets the maximum length of a shift, for example 16 hours, it is possible to limit excessive workloads while allowing medical treatment institutions a certain degree of flexibility. This model serves as a transitional solution between 24-hour and 12-hour systems.

Benefits:

- Reduces the most dangerous overload.
- Easy to understand and implement with minor structural changes.

Challenges:

- 16 hours is still excessive working time.
- It may give the illusion of reform, but does not significantly change the impact of workload on health.

3. Modular Work (2x6-Hour or 3x8-Hour Shifts per Day)

The modular system provides for an equal distribution of hours per day across shifts. Popular examples:

- 6-hour shifts: 07:00–13:00, 13:00–19:00, 19:00–01:00, 01:00–07:00,
- 8-hour shifts: 07:00–15:00, 15:00–23:00, 23:00–07:00.

This model ensures more accurate handover of care, reduces the risk of errors, and is effective in ensuring continuity of care.

Benefits:

- Reduces cognitive fatigue.
- Ensures a transparent schedule and division of responsibilities.
- Promotes teamwork dynamics.

Challenges:

- Requires more staff and more precise coordination of shifts.
- Higher administrative costs and complexity of schedules.

4. Flexible Shifts According to the Unit Profile

This model is based on personalised planning, where the length and structure of shifts are tailored to the specific unit and staff. Intensive care units could keep 12-hour shifts, while the staff of chronic care units could work 8-hour shifts. Personalised schedules allow taking into account employees' personal circumstances, such as childcare, studies, or state of health.

Benefits:

- Increases employee satisfaction and retention.

- Promotes work-life balance.
 - Reduces turnover and burnout.
- Challenges:
- Digital planning platforms are needed.
 - More complex shift planning and coordination.

Table 1. Comparative Table on Alternative Shift Models [18–27].

Model	Satisfaction (%)	Patient safety (%)	Efficiency (%)	Notes
12-hour shift model	75	78	80	Available in units with lots of resources
Max. 16-hour shifts	68	72	74	Transitional solution
Modular (2x6h or 3x8h)	82	88	86	High level of coordination required
Flexible shifts	90	93	92	Staff planning platform required

These models are not mutually exclusive – they can be combined depending on the needs of the unit, the availability of staff, and the strategy of the institution. The most important thing is to abandon the 24-hour shift as the basic model and replace it with a more structured system that supports employee well-being.

In further stages, these models can be tested in pilot projects, their effectiveness measured and adjustments made before widespread implementation. This approach allows reducing resistance, adapting to actual capacities, and gradually improving the quality of the working environment in healthcare in Latvia.

6. Prerequisites for Implementing the Model

The transition from a 24-hour work arrangement to a safer, structured shift system in Latvian healthcare is not possible without a systematic approach and the fulfilment of several prerequisites. It should be borne in mind that such reforms are not simply technical organisational changes, but also cultural changes in the working environment that affect professional identities, habits, and institutional loyalty. Their implementation therefore requires careful preparation and a multi-layered strategy.

Firstly, the regulatory framework needs to be reviewed and adapted. To provide a legal basis for the introduction of new shift models, the Labour Law should be amended to set a maximum duration per shift, e.g., 12 or 16 hours, and specific provisions should be included on the organisation of work in healthcare, taking into account its specific nature. Collective agreements should play a greater role in shaping individual agreements and local solutions, while the Ministry of Health should develop guidelines on recommended work schedules, their organisation, and monitoring mechanisms. These documents should be drawn up in accordance with the European Union Directive 2003/88/EC concerning certain aspects of the organisation of working time, ensuring consistency with international occupational safety standards [21–27].

Secondly, provision of human resources is a prerequisite for a successful transition. The combination of higher numbers and shorter shift lengths means additional staff units are needed. This is especially true for nights, weekends, and intensive care units, where the intensity of care is higher. Job descriptions should clearly define shift durations, reassignment of duties, and handover procedures. At the same time, incentive mechanisms should be developed to encourage nurses and other healthcare specialists to work flexible schedules, such as night differentials, bonuses for flexible availability, or opportunities to work part-time with a reasonable workload distribution. A strategy should also be developed for returning employees to the labour market from parental leave or after a period of burnout.

Thirdly, financing is essential. The new shift system means higher expenses for remuneration, information systems, and transition support. Therefore, it is necessary to ensure additional funding from the state budget at least for the transition period, for example, three years, as well as to provide earmarked grants to medical treatment institutions for the implementation of pilot projects. It is important to consider the possibility of using the European Union Structural Funds or the Recovery and Resilience Mechanism, as well as reviewing tariffs in certain areas of care to ensure long-term sustainability.

Fourthly, there is a need for targeted management and staff education. Changing schedules is not just a technical task – it requires changes in management skills, approaches to workforce planning, and communication with employees. Training should therefore be provided to heads of units, chief nurses, and HR specialists on dynamic and balanced work scheduling. At the same time, staff participation in decision-making should be strengthened, for example through internal forums, surveys, or pilot schedules to build trust and reduce resistance. It is equally important to dispel widespread myths about the ‘effectiveness’ of 24-hour shifts, based on facts about errors, burnout, and patient safety.

Fifthly, technological infrastructure is an essential prerequisite for the introduction of flexible work schedules. In modern practice, successful personnel management is unthinkable without specialised software that allows planning shifts, recording workload, monitoring rest periods, and ensuring transparency for all parties involved. Such a system is not yet widespread in Latvia, but its introduction would be a strategic investment in the quality of healthcare and staff retention. Consideration could be given to introducing a centralised solution for all public authorities, which would ensure both uniform accounting and transferable practices between different profiles.

Sixthly, it is advisable to introduce pilot projects in different types of medical treatment institutions, such as a university hospital, a regional hospital, a psychiatric ward, or an emergency medical service, before a general reform. These pilot projects would allow different shift models and their impact on workload, patient safety, staff satisfaction, and financial costs to be tested in practice. Only after such a practical evaluation would it be justified to decide on general introduction at national level. It is important that pilot projects are implemented with a clear framework of objectives, indicators, and evaluation mechanisms.

Finally, continuous monitoring and evaluation of results is needed. Monitoring indicators need to be established, such as compliance of work schedules with norms, number of employee sick leaves, burnout level dynamics, patient error statistics. The Ministry of Health should establish a coordinating body responsible for implementing, evaluating and, where necessary, adjusting this reform. Annual progress reports can serve as a tool for both public information and policy adjustments.

Together, these prerequisites form the basis for sustainable and people-centred reform. Its aim is not simply to change work schedules as an end in itself, but to ensure high-quality, safe, and professionally responsible care for all residents of Latvia. At the same time, the reform confirms that nurses and other healthcare staff are seen as the core of the system, not just resources to be exploited. Therefore, such changes are not just a technical challenge – they are also a test of values and an opportunity to create a new work culture in Latvian healthcare.

7. Recommendations and Conclusions

Firstly, it is recommended to start a gradual transition from 24-hour shifts to structured, shorter shifts, starting with pilot projects in high-workload units. Such an approach would allow examining the impact on staff workload, number of errors, sick leaves, and patient safety. Based on the results of the pilot project, it would be possible to determine the most optimal shift model for a given treatment profile and institutional structure. The choice should not be based on an ideological assumption of the ‘best model’, but on empirical evidence from the local context.

Secondly, there is a need for general guidelines or a policy document at national level to regulate the organisation of working time of medical practitioners, setting acceptable shift lengths, minimum

standards for rest time, and recommended schedule models. These guidelines must be developed in collaboration with professional organisations and medical treatment institutions themselves, ensuring compliance with both laws and regulations and the reality of care. The guidelines should also include mechanisms to monitor the impact of the implemented schedules on staff and patients.

Thirdly, additional investment in human resources is needed, in terms of numbers, quality, and motivation. A new schedule system requires more staff, but also more efficient use of them, such as more accurate shift planning according to the intensity of care, involving technical staff in certain processes, and stronger interprofessional cooperation. At the same time, employee well-being policies must be strengthened, psychological support provided, burnout reduced, and a sustainable professional identity developed.

Fourthly, it is necessary to develop a unified, nationally integrated information system that allows for the effective management and analysis of staff schedules, workloads, shift lengths, and rest periods. Such a system would be an instrument not only for management, but also for policy makers, providing a data-driven basis for decision-making. This system should be designed to export, compare, and evaluate the practices of different institutions, facilitating the exchange of experience and the adaptation of innovations.

Fifthly, a broad public discussion is required about the working conditions of healthcare professionals, especially the public perception of the 'culture of sacrifice' associated with 24-hour shifts. Professional burnout, errors, emotional stress, and disruption of personal life should not be romanticised as 'a heroic deed', but rather recognised as a systemic problem that requires a structured solution. That is why communication strategy is part of the change process – it helps reduce internal resistance, strengthen understanding, and generate long-term support.

On the basis of this analysis, the following scientifically sound conclusions can be drawn:

1. the 24-hour shift model, which is still widely used in Latvian healthcare, contradicts both modern principles of patient safety and standards of staff well-being, and contributes to professional burnout, increased errors, and staff turnover.
2. Alternative schedule models, including 12-hour, 8-hour and flexible shifts, are scientifically proven safer and more human-centred solutions that provide higher quality of care and staff satisfaction. Their introduction requires major structural changes to the system.
3. Successful reform requires regulatory, institutional, technological, and financial readiness, as well as the involvement of professionals. Only a comprehensive, gradual, and evidence-based process can achieve sustainable change.
4. The implementation of pilot projects is an important intermediate step that allows different models to be tested in practice and solutions to be adapted before national implementation. Without empirical evidence, reform risks becoming formal and irrelevant to the specific characteristics of different institutions.
5. Abolishing 24-hour shifts is not just a question of work organisation, it is a systemic, professional, and ethical choice about the quality of healthcare, patient safety, and staff dignity.

This transformation should therefore not be seen as a technocratic experiment, but as a necessary part of the reform that is building a human-centred, excellence-based healthcare system in Latvia. Working with people should not be based on selflessness as the main mechanism – it should be based on competence, balance, and respect.

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Abbreviations

The following abbreviations are used in this manuscript:

OECD	Organisation for Economic Co-operation and Development
EU	European Union
WHO	World Health Organization
ILO	International Labour Organization
RSU	Riga Stradiņš University
SLI	State Labour Inspectorate
SPKC	Centre for Disease Prevention and Control
ANA	American Nurses Association
EC	European Council
UK	United Kingdom
USA	United States of America

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