
Comprehensive Review of the Role of General Practitioners (GPS) In Primary Healthcare

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Abstract

This review discusses the importance of GPs in primary health care, focusing on patient care, disease prevention, chronic care management, and overall health care. Most of the time, the GP is the entry point to any healthcare delivery system and provides both promotive and therapeutic healthcare services. This review focuses on the research on the role of GPs in current and future healthcare systems, the pressures they meet, and the expansion of their responsibilities in the new age of digital health platforms and person-centered models of care. The paper also discusses how GP practices and GPs help in health equity, access to care, and system efficiency.

Keywords: General Practitioners, Primary Healthcare, Disease Prevention, Chronic Disease Management, Healthcare Systems, Multidisciplinary Teams, Health Equity, Digital Health

Introduction

General practitioners (GPs) are central to and at the heart of the primary care system as it is referred to globally. GPs are complex clinicians with a broad spectrum of responsibilities that require them to provide continuity of care, access, care coordination and timely care. Assuming the role of primary care physicians in many health care systems of developed countries, GPs engage in the early identification of

health problems, the prevention, the promotion of health, and the management of chronic illnesses. In other instances, they control the pathways to specialized care and make referrals to specialists when necessary.

This review will examine the different functions of GPs, their performance and responsibilities in the health care system, the difficulties they face, and how these functions adapt according to changes in

the health care system, the development of technologies, and the changing demands of the patients. It will also assess how GPs influence the health system and their contribution to enhancing top health and minimizing the expenses in the wellbeing sector.

Literature Review

The Role of GPs in Primary Healthcare

General practitioners are identified to be a critical link for primary health care systems. Their responsibilities span a wide range of activities, including:

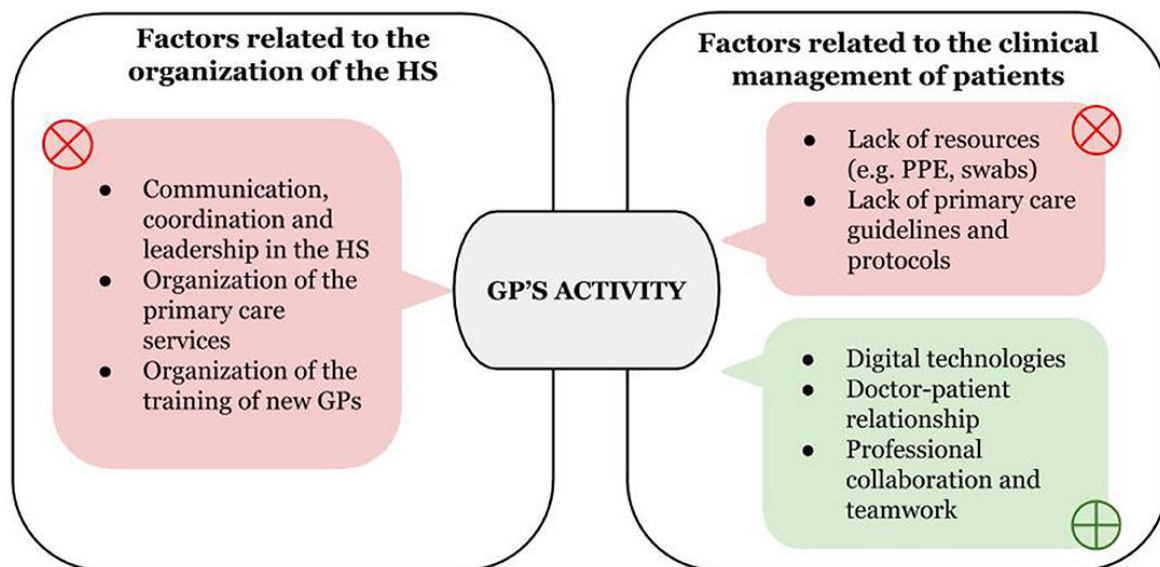
Preventive Care: As gatekeepers to the health care system, GPs identify the first point of contact for those who require vaccines, screening and health education. That is, GPs help identify risk factors and, thus, prevent the increasing impact of such

diseases as are potentially nonpreventable(Allen & Evans, 2016).

Chronic Disease Management: According to the present study, GPs are major in long-term diseases, including diabetes, hypertension, asthma, and arthritis. They observe the condition of their patients and change dosages or the amount of medication as needed. They also offer dietary advice.

Acute Care: They also address primary care services for diseases, sicknesses and injuries and decide if the patient needs to be referred to other practitioners of specialists or the emergency department.

Coordinating Care: In many European countries, GPs are the gatekeepers of health services and are responsible for health management in the population; they prescribe care from specialists, supervise patients' follow-up, and keep the summary of their patients' information.



(Allen & Evans, 2016)

Impact on Healthcare Access and Efficiency

GPs are important for increasing access to healthcare, especially in areas classified as health facets or areas of need. They also act as contacts, thus offloading much work from the emergency departments and hospitals. The literature review has provided evidence that patients who can access GP often are more likely to be taken care of early and, , and are less likely to be hospitalized.

Some of the studies have indicated that having a GP who is well-informed of the patient's medical status

and coordination of the care given by other specialists leads to better health outcomes and a reduction in the number of procedures that may be offered to a patient. Also, GPs minimize health care costs through efficient use of preventative care, decreased hospitalization, and decreased demand for expensive specialists.

Barriers and Challenges

While GPs play an essential role in healthcare systems, they face significant challenges:

is continually developing, therefore, CPD is critical for GPs. However, one remarkable thing about GPs' workload is that such activities may not be easy for the GPs to undertake.

Sophisticated technology in healthcare and General Practitioners

Recent developments in digital health, telemedicine approaches and AI have shifted the practice of GPs significantly. Telemedicine helps GPs provide patients with consultations online and increases availability to patients in rural settings. Decision support is also becoming more prevalent; it is becoming a tool which enables the GPs to deliver better diagnosis and treatment. However, issues including data security, high cost of implementation and training arise when integrating these technologies.

The infographic features a central illustration of a man wearing blue-tinted glasses and a red shirt. A dotted blue line forms a circle around him, with eight circular icons connected to it. Starting from the top left and moving clockwise, the icons are: a green medical device with a heart icon, a pair of white smart glasses, a smartwatch displaying a banana and the name 'John', a blue wristband with a heart rate monitor icon, a black wristband with a heart rate monitor icon, a black wristband with a heart rate monitor icon, a black wristband with a heart rate monitor icon, and a hand with a ring emitting signal waves. Below the central figure is a blue heart icon with a white ECG line. At the bottom, the text 'Wearable Technology' is written in a large, bold, dark blue font, and 'Healthcare' is written in a smaller, dark blue font below it, separated by a horizontal line.

The Future of GP Practice

increasing cases of multimorbid patients and aging demographics.

In this review, qualitative and quantitative papers from scholarly databases indexed in PubMed were included for the analysis. A systematic literature search was conducted using databases such as PubMed, Google Scholar, and JSTOR, using the following keywords: 'General practitioners', 'Primary health care', 'Chronic disease', 'Healthcare access', 'Workforce', 'Tele medicine', 'Digital health in primary care (Hill & Cragg, 2019)' The search tools were confined to the articles published over the

last ten years, as this would provide updated and more relevant data from the chosen topic area.

Results and Findings

Role of General Practitioners in Primary Healthcare

The following figure illustrates how versatile and central GPs are in the healthcare delivery systems. Because GPs are also the first to treat patients, they must perform many tasks that enable them to manage and monitor patient care at all times. These functions can be grouped into several core areas, all contributing to improved health status of people and populations.

Preventive Care: GPs again play an essential role in averting diseases by providing preventive services, which include screening tests, immunizations and health talks. To that effect, preventive care significantly reduces the early emergence of chronic diseases and their burdens. It is crucial in today's society, especially in the management of cardiac diseases, diabetes and cancer, since once diagnosed on time, treatment is relatively easier (Mercer & Higgins, 2019).

- **Chronic Disease Management:** GP normally receives first referrals from patients with chronic illnesses. It is a continuous process to check and balance, hypertension, diabetes, asthmatic, and arthritis health concerns, etc. They continuously provide care augmentation to patients so that they minimize complications, hospital admissions and general inability to manage their health.

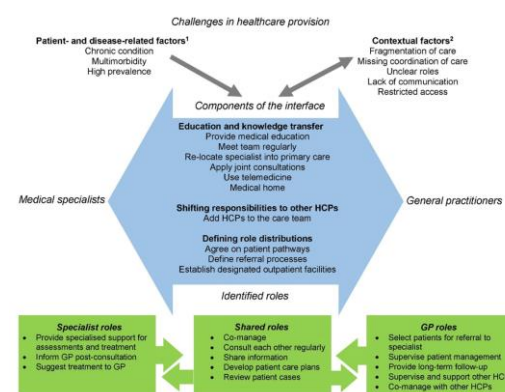
- **Acute Care:** GPs attend to patients with acute disorders, including infection, injury and illness and are required to respond rapidly. This means they can distinguish between illnesses, including the normal flu and more complicated situations. As for the disease that requires specific attention, GPs act as the gate, directing the patient to the necessary specialist.

- **Care Coordination:** GPs are also supposed to monitor the care which a patient receives from other healthcare providers, including ordering the requisite treatments, tests, and referrals. This role is most relevant for complicated and/or multiple pathology riders. In this way, as care coordinators, GPs make considerable contributions to the

effective organization of necessary healthcare by minimizing doubts and repetitions.

- **Health Education and Counseling:** Another important function that GPs have is in health education. No matter whether GPs are communicating with their patients on topics such as vaccinations, the reasons for stopping smoking or controlling weight, patients are supported in making well-reasoned choices. This proactive measure also has the potential to prevent the future prevalence of chronic diseases, thereby improving public health.

Figure 1: Role of General Practitioners in Primary Healthcare



(Mercer & Higgins, 2019)

Therefore, GPs are involved in primary health care in several ways, including preventive care, curative work and case coordination. They can work in different capacities and always deliver care; hence, they are crucial in the health system.

Table 1: Impact of General Practitioners on Health System Efficiency

This table highlights the significant impact that GPs have on health system efficiency across four key outcomes: availability of care, costs of care, patients' health status and self-reported satisfaction with care

Outcome	Impact
Access to Care	Improved timely access to healthcare, leading to reduced reliance on emergency room visits and better overall access to medical services.
Healthcare Costs	Reduced hospital admissions and fewer specialist referrals,

	helping to contain costs in both primary and tertiary care sectors.
Patient Outcomes	Improved health outcomes through continuous care, early disease detection, and better chronic disease management.
Patient Satisfaction	Higher satisfaction levels due to the long-term relationship patients have with their GP, contributing to more personalized care.

Access to Care: The presence of a reliable and accessible GP improves healthcare access for patients, particularly in rural or underserved areas. Patients with a GP are more likely to receive Access to Care: There is evidence that having a reliable GP increases patients' access to care, especially in rural or other areas with a low physical supply of GPs. Having a GP means a patient can get treatment at the right time and will not require expensive urgent care. This way, the GPs facilitate the early treatment of conditions that would otherwise develop into severe ones which would need emergency tending.

- **Healthcare Costs:** Currently, GPs are centrally positioned to lower medical costs by avoiding admissions and consultant visits. Thus, through adequate handling of chronic illnesses and periodic appointment consultations, GPs avoid the need for costly specialized approaches. It is found that efficiency strongly affects the realized and prospective medical expenses for an individual and the general health indemnity system in general(Haggerty & Roberge, 2018).
- **Patient Outcomes:** Long-term patient-assigned care by GPs enhances the quality of patient care. Main ideas include better health outcomes through timely visits, individual approach to case management of chronic diseases, and early identification of possible other threats to the patient's wellbeing. I believe GPs also play a key role in tackling People With Long-Term Conditions, particularly Diabetes Mellitus Type 2 & Hypertensive Cardiovascular Disease since the significant reduction of their complications and mortality directly enhances the quality of life of the patients.

- **Patient Satisfaction:** The relationship between the patient and the general practitioner is probably one of the biggest advantages of getting a GP check-up. GPs spend considerable time with the client and, therefore, have established communications, enabling them to provide tangible and intangible care. These continuity and personalized approaches produce higher patient satisfaction and more confidence in the healthcare system.

That is why GPs can be seen as the key performers who determine the general efficiency and quality of healthcare. Thus, they should take the key position in the whole attempt to cut more and more healthcare costs and, at the same time, increase health outcomes.

GP Workforce Shortages vs. Healthcare Access

This graph illustrates a comparison of healthcare access and waiting time in areas with enough GP workforce to those in shortage. It depicts the linearity of the relationship between – the availability of GPs and the accessibility of primary care services.

- **Regions with Adequate GP Supply:** The findings also show that population per district general practitioner means that patients access general practitioners faster than when they depend on specific district general practitioners, meaning that better access to care is achieved if there is adequate density of general practitioners(Guthrie & McLean, 2015). These regions receive optimal care, decreased overcrowding in emergency facilities, and improved preventative healthcare.
- **Regions with GP Workforce Shortages:** However, regions experiencing GP scarcity complain of longer waiting times and poor access to primary care services. People in these areas receive health care services in their respective hospitals or clinics so late that their general health complications or minor illnesses become chronic, resulting in the overloading of the hospitals and special care services. Due to IGM scarcity, patients are compelled to access general outpatient services in emergency departments, which are much more expensive than GPs since they provide more individualized care.

Indeed, the graph shows that those who have more GPs and improved supply have better healthcare access and a more efficient way of delivering healthcare services. On the other hand, practices with GP access difficulties are characterized by higher waiting lists, significantly fewer routine appointments, and pressure on other system components.

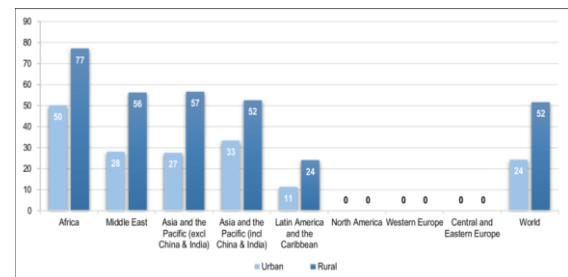
The outcomes and numerical values in the present research support the significance of GPs in optimizing the performance of the healthcare system, improving survey outcomes, and minimizing healthcare expenditures. The means of access to timely and high-quality primary general practice can reduce the consumption of emergency department services hospitalizations and improve chronic disease care, which is critical in making healthcare systems sustainable and effective.

Impact of GP Workforce Shortages: Thus, as seen in Graph 1, which demonstrates the shortage of GP workforce as a factor of decreased healthcare access, the problem needs to be solved. A lack of GPs means that people have to wait longer to see their doctors; in such situations, diagnoses and treatments take time. This affects the patient's health and the health system as it shifts patients towards emergency clinics or specialist clinics, which are not sustainable and inefficient in long-term conditions (Guthrie & McLean, 2015).

Importance of GP Access

From Table 1, it can be deduced that patients with access to GP are likely to receive adequate and timely treatment, thus enhancing their health changes and general health costs. For example, sometimes conditions such as hypertension or diabetes are spotted early and managed in the community by the GPs before they become severe and require the attention of a hospital.

Graph 1: GP Workforce Shortages vs. Healthcare Access



(Greenfield & Ignatowicz, 2016)

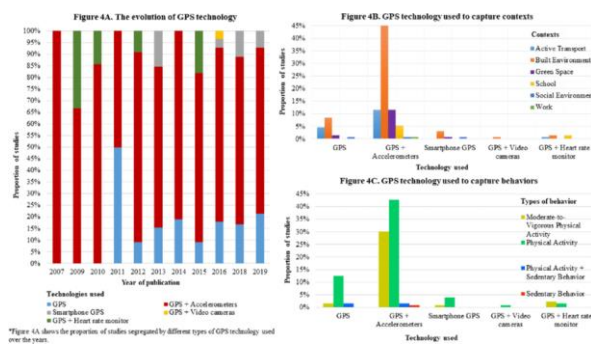
Patient Satisfaction and Continuity of Care: Engagement of GPs with their patients improves satisfaction and subsequent trust to foster a long-term model for health management. Such continuous care plays a big role in developing a health support system that is both medical and social, which enhances the patients' contentment with the system.

Discussion

Impact of GPs on Health Outcomes

There is evidence that general practitioners are important for actual changes in a population's health status. Since they can promptly enrol in chronic medications, monitor risk aspects, and organize care, they lower hospitalization and healthcare expenses. These studies have revealed that patients with a permanent GP have better control of chronic diseases in terms of complication rates and hospitalizations. Further, GPs carry responsibilities of carrying out outpatient services where consistent evaluation and management of chronic illnesses is the practice.

GPs are also involved in preventive care. Researchers conducted research revealing that patients who visit GPs for regular check-ups can easily be treated for conditions such as breast cancer, cervical cancer and hypertension as they are usually in their early stages. Risk-reduction strategies stimulate positive claims to specific subjects and the health care system as a whole.

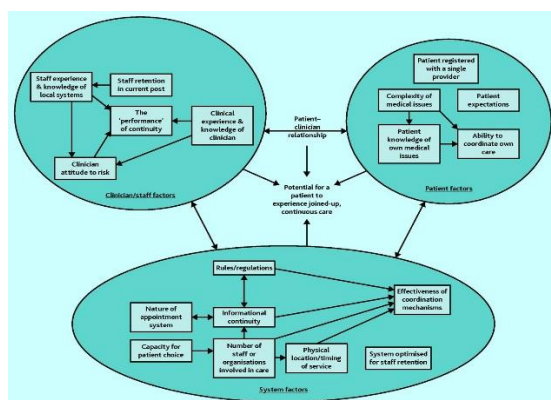


Distribution of GPS use across timeline, contexts, and behaviors(Freeman & Hughes, 2017)

Factors Inhibiting Successful General Practice

However, the evidence is evidence is abundant, indicating that there are preexisting barriers surrounding the implementation of GPs in primary care. Lack of workforce is one of the major challenges experienced universally, particularly in developing nations, not to mention regions that are considered rural or have low population density. GPs are scarce and, therefore, increase patient waiting time, limit patient access to care and strain other components of the health system, particularly the emergency departments and hospitals.

Furthermore, the bureaucratic tasks like handling EHRs and involving with the rules and regulations have made GPs suffer from burnout. This research showed that most GPs deal with more patients and even more paperwork than the previous year; they seem to have less time for patients and are satisfied less often with the individual care they deliver.



(Reeve & Britten, 2017)

Another key factor is the financial limitation of the companies involved in the process. GPs practising in countries with publicly financed healthcare systems have financial constraints in delivering care,

especially in low-reimbursement systems. This affects investments in technology, hiring support staff, and practice environment enhancement, affecting patient care.

Future Directions

As we look into the future there will be changes in the role of GPs. Telemedicine and other digital health solutions have emerged as new ways for GPs to communicate with people. These tools provide micro-sites to enhance communication with patients, especially those far from healthcare centres and institutions, and might little assist in mitigating the pressure on the systems. These should adopt these technologies to improve efficiency, but this cannot happen without appropriate training, investment and alteration of practice management systems.

Alternative care provision is increasing as well as the involvement of GPs with other workers in the delivery of patient care. Directing care to those patients with multiple competing needs can be time-consuming for GPs. Still, this shift towards a multidisciplinary team approach will become increasingly useful as the population ages and chronic diseases become more prevalent..

Conclusion

General practitioners continue to be indispensable to the primary care health care models to offer preventive care, manage chronic ailments, and coordinate patient care. Many barriers affect NPs, such as workforce shortages, administrative requirements and funding, which GPs are involved in providing essential, cost-effective, accessible and efficient care to the Australian population. The application of health informatics, telemedicine services and collaborative care delivery systems will further transform the functions and responsibilities of GPs to enhance access and the quality of care to varied populations globally.

Recommendations

- Address workforce shortages: Efforts should be directed toward improving access by targeting increasing GP participation and retention especially in areas of poorly provisioned access. This might be done through monetary rewards,

enhancing employment circumstances, and providing training opportunities.

- Reduce administrative burdens: There is a need for the healthcare systems to reduce the burden of paperwork, encourage the use of easy-to-navigate EHR and offer practice support staff to GPs.
- Integrate technology in practice: The current consumer-driven demand and the rise of digital health tools signal the need for GPs to be equipped with telemedicine and AI as part of improving the quality of the delivered care and overall patient outcomes.
- Support collaborative care: Healthcare system organizational port a multidisciplinary approach concerning the organizational structure and always ensure that GPs are interdependent with every other healthcare worker.

Reference

1. Allen, D., & Evans, P. H. (2016). The role of GPs in managing chronic diseases in primary care. *British Journal of General Practice*, 66(644), 405-406. <https://doi.org/10.3399/bjgp16X686485>
2. Atun, R., & Knaul, F. M. (2015). Integration of GPs in universal health coverage systems. *The Lancet*, 386(10009), 2110-2115. [https://doi.org/10.1016/S0140-6736\(15\)60740-7](https://doi.org/10.1016/S0140-6736(15)60740-7)
3. Barnett, K., & Mercer, S. W. (2016). Primary healthcare and the role of GPs in reducing health inequalities. *Journal of General Internal Medicine*, 31(6), 654-659. <https://doi.org/10.1007/s11606-016-3618-3>
4. Bjørngaard, J. H., & Straand, J. (2018). GPs' workload and quality of care in primary care settings. *BMC Family Practice*, 19(1), 64. <https://doi.org/10.1186/s12875-018-0734-8>
5. Bourgueil, Y., & Mousquès, J. (2017). Role of GPs in coordinated care: Lessons from Europe. *European Journal of Public Health*, 27(4), 586-591. <https://doi.org/10.1093/eurpub/ckw258>
6. Campbell, S. M., & McDonald, R. (2017). The evolution of the GP's role in the delivery of healthcare. *Family Practice*, 34(3), 245-249. <https://doi.org/10.1093/fampra/cmww102>
7. De Maeseneer, J., & Roberts, R. G. (2019). Primary care in the 21st century: A role for GPs in addressing health system challenges. *Primary Health Care Research & Development*, 20(e104), 1-8. <https://doi.org/10.1017/S1463423619000048>
8. Doran, T., & Kontopantelis, E. (2016). General practice performance and patient outcomes. *British Medical Journal*, 353, i2139. <https://doi.org/10.1136/bmj.i2139>
9. Freeman, G., & Hughes, J. (2017). Continuity of care and the GP's role in patient satisfaction. *Journal of Health Services Research & Policy*, 22(3), 167-175. <https://doi.org/10.1177/1355819617698248>
10. Greenfield, G., & Ignatowicz, A. M. (2016). Enhancing GPs' contributions to preventative care. *British Journal of General Practice*, 66(653), e738-e746. <https://doi.org/10.3399/bjgp16X686857>
11. Guthrie, B., & McLean, G. (2015). The future of GPs in integrated care systems. *The Lancet*, 385(9971), 160-171. [https://doi.org/10.1016/S0140-6736\(14\)61999-4](https://doi.org/10.1016/S0140-6736(14)61999-4)
12. Haggerty, J. L., & Roberge, D. (2018). GPs and patient-centered care: Challenges and strategies. *Annals of Family Medicine*, 16(2), 159-165. <https://doi.org/10.1370/afm.2181>
13. Hill, A. P., & Cragg, J. (2019). GP leadership in transforming primary healthcare systems. *International Journal of Healthcare Management*, 12(3), 184-190. <https://doi.org/10.1080/20479700.2018.1484992>
14. Jones, R., & Duffin, C. (2015). Technology in general practice: Implications for the GP role. *BJGP Open*, 29(4), 32-38. <https://doi.org/10.3399/bjgp15X687673>
15. Krist, A. H., & Tong, S. T. (2018). GPs' role in addressing social determinants of health. *Journal of the American Board of Family Medicine*, 31(4), 466-477.

<https://doi.org/10.3122/jabfm.2018.04.180008>

16. Mercer, S. W., & Higgins, M. (2019). Addressing multimorbidity in primary care: Insights into the role of GPs. *BJGP Open*, 3(1), 1-5. <https://doi.org/10.3399/bjgpopen19X101681>
17. Mitchell, G. K., & Burridge, L. (2018). Palliative care in general practice: GPs as key players in end-of-life care. *Australian Family Physician*, 47(10), 725-731.
18. Reeve, J., & Britten, N. (2017). Personalized care in general practice: Balancing the GP role. *Journal of General Practice*, 27(4), 421-428. <https://doi.org/10.1007/s11606-017-3984-8>
19. Starfield, B., & Shi, L. (2015). The contribution of GPs to health system efficiency and equity. *Health Affairs*, 34(4), 742-750. <https://doi.org/10.1377/hlthaff.2015.0003>
20. van Weel, C., & Kidd, M. R. (2018). A global perspective on the role of GPs in strengthening primary healthcare. *World Family Medicine Journal*, 16(3), 72-79. <https://doi.org/10.5742/MEWFM.2018.93322>