

Policy Recommendations on Strengthening CKD Strategies for Workers:

The Importance of Providing Early Detection, Intervention,
and Support Through Screenings and Medical Visits

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1. Background to these recommendations

The need for chronic kidney disease (CKD) strategies in Japan

In its early stages, chronic kidney disease (CKD) has few subjective symptoms, and the kidneys are called, “the silent organs.” This means that when symptoms of CKD such as fatigue, edema, and anemia do manifest, in many cases, the disease has already advanced. Nephrons¹ that fail do not regenerate, and people in end-stage renal failure require dialysis or kidney transplantation to survive. According to a statistical survey from the Japanese Society for Dialysis Therapy, by the end of 2022, there were approximately 350,000 chronic dialysis patients in Japan, with 39,683 new people beginning dialysis that year.² While the number of new dialysis patients has been trending downward since 2020, it shows no signs of stopping, in part due to population aging. In addition, the total cost of dialysis treatment in Japan is 1.57 trillion yen per year,³ so it is desirable that there is a decrease in the number of people on dialysis from the perspective of optimizing healthcare expenses, as well.

In Japan, national and local authorities have been advancing efforts to implement policies for kidney disease since the Kidney Disease Control Review Meeting was convened by the Ministry of Health, Labour and Welfare (MHLW) in 2007, and it will be vital to strengthen CKD measures for people who require treatment in stages leading to dialysis. CKD is defined as “a condition in which kidney function decline or kidney damage persists for three months or more.”⁴ With CKD affecting an estimated one in five adults in Japan, it can be considered a new major disease for the country. Because CKD is closely associated with lifestyle diseases like diabetes and hypertension, it is particularly important to provide early detection, intervention, and support for CKD in combination with other diseases.

CKD strategies for workers⁵

As of the end of 2022, the average age of people on dialysis was 71.42 years,⁶ demonstrating that kidney disease frequently manifests at an advanced age. However, among the 347,474 people on chronic dialysis, 102,167 people are under the age of 65.⁷ This means we must not overlook workers living with pre-CKD, or people living with conditions like diabetes or hypertension and who have yet to develop CKD. Annually, dialysis costs 5 to 6 million yen per person, which poses issues in terms of cost to public health finances, but even early-stage CKD is associated with an increase in annual healthcare spending of approximately 30,000 to 190,000 yen per person.⁸ In addition to the need to improve quality of life (QOL) for patients, from the perspective of curbing this burden on public health spending, it is desirable that prevention, early detection, intervention, and support for CKD are also strengthened, including for the prevention of severe diabetes and hypertension. In fact, a study using data from about 70,000 people who received specific health checkups through the Health Insurance Association for Architecture and Civil Engineering Companies found that there was a tendency toward deteriorated kidney function among people who did not seek a medical examination at a health institution despite suspicion of CKD during their routine checkup.⁹ Expectations are high for more thorough medical examinations to be conducted to respond to such circumstances.

1 A nephron is the basic functional unit of the kidney that consists of a filter called a glomerulus and long, narrow tubules, and that separate necessary substances in the body from the waste. Department of Nephrology, Toho University Sakura Hospital. <https://www.lab.toho-u.ac.jp/med/sakura/neph/nephrons/index.html>, Last retrieved on October 17, 2024.

2 Hanafusa, N. et al. “2022 Annual Dialysis Data Report, JSDT Renal Data Registry”, As of December 31, 2022. *Journal of the Japanese Society for Dialysis Therapy*. 2023, vol.56, no.12, p.477.

3 MHLW. “Regarding Efforts for Diabetic Nephropathy Aggravation Prevention.” https://www.mhlw.go.jp/file/06-Seisakujouhou-12600000-Seisakutokatsukan/0000114064_13.pdf, Last retrieved on September 9, 2024.

4 Japanese Society of Nephrology. “Clinical Practice Guidelines for CKD 2024.” Tokyo Igaku-sha. 2024.

5 In these recommendations, the term “workers” is meant to refer to “General employees who are eligible for employment-based insurance and part-time employees who are obligated to receive health checkups (including those with indefinite or fixed-term contracts of one year or more, and who serve a minimum of three-quarters of the weekly scheduled working hours of regular employees).” Other workers are assumed to be part-time workers and workers covered by National Health Insurance who do not fall under this definition. Policy recommendations offered by HGPI in FY2023 titled “Establishing Kidney Disease Control Measures with Patient, Citizen, and Community Engagement and Collaboration” includes a collection of best practices for CKD control in local governments and focuses on CKD strategies for people covered by National Health Insurance. This document describes the need for CKD strategies for workers who meet the definition provided above.

6 Hanafusa, N. et al. “2022 Annual Dialysis Data Report, JSDT Renal Data Registry”, As of December 31, 2022. *Journal of the Japanese Society for Dialysis Therapy*. 2023, vol.56, no.12, p.487.

7 Hanafusa, N. et al. “2022 Annual Dialysis Data Report, JSDT Renal Data Registry”, As of December 31, 2022. *Journal of the Japanese Society for Dialysis Therapy*. 2023, vol.56, no.12, p. 477,487, Last retrieved on October 17, 2024.

8 Sakoi N, Fukuma S. et al. Early-Stage Chronic Kidney Disease and Related Health Care Spending. *JAMA Netw Open*. 2024 Jan 2;7(1):e2351518.

9 Yamada Y, Fukuma S. et al. Undiagnosed and untreated chronic kidney disease and its impact on renal outcomes in the Japanese middle-aged general population. *J Epidemiol Community Health*. 2019 Dec;73(12):1122-1127.

In the workplace, there are hindrances to health and stress factors that workers cannot control on their own. In addition to self-help efforts made by individuals and support from community health measures, employers must be proactive about occupational health if these factors are to be addressed. At the same time, occupational health experts know that it is rare for the initial detection of severe kidney disease to occur with underlying conditions other than lifestyle diseases. Furthermore, in the field of occupational health, kidney disease does not often require special management or employment classification decisions. Given these factors, there is low awareness toward the issue of kidney disease in the field of occupational health. However, among workers, the number of people living with CKD, the number of people at risk for CKD, and the number of people on dialysis are not small. This means it will be necessary to consider realistic CKD strategies and their necessary scope for workers based on an accurate understanding of issues in existing measures for kidney disease control. Therefore, these recommendations focus on workers, which is a topic that did not receive adequate coverage in [“Establishing Kidney Disease Control Measures with Patient, Citizen, and Community Engagement and Collaboration: Policy Recommendations and Best Practices for Chronic Kidney Disease \(CKD\) Control from Local Governments”](#) presented by HGPI in February 2024.

2. Recommendation 1: Strengthen CKD screening conducted as part of routine health checkups for workers.

- Proteinuria screening in workers should be strengthened for the early detection of CKD and people at risk of CKD, and serum creatinine testing should be performed in people with underlying diseases like diabetes or hypertension to thoroughly evaluate kidney function.
- While taking into account the fact that there is variation in proteinuria and abnormal serum creatinine levels among individuals, criteria should be defined in a manner that anyone who undergoes screening can be connected to healthcare at the time that is right for them, and further consideration should be given to expanding the scope of serum creatinine testing.
- After considering how to make the best use of health checkup results, a system should be built that smoothly guides people who need treatment to healthcare so their conditions can be managed on an ongoing basis.

Background items related to this recommendation

Methods of diagnosing CKD

The criteria for diagnosing CKD are, “For three months or more, there is (1) clear kidney impairment by abnormal urine, imaging, blood tests, or pathological diagnosis, with the presence urinary protein levels greater than or equal to 0.15 g/gCr (albuminuria greater than or equal to 30 mg/gCr) being particularly important; and/or (2) glomerular filtration rate (GFR) is lower than 60 mL/min/1.73 m²” (Japanese Society of Nephrology, 2023).¹⁰ Measuring GFR usually requires complicated procedures that include collecting urine and blood for about two hours, so during routine medical examinations, checkups, and similar examinations, estimated Glomerular Filtration Rate (eGFR) is calculated instead. However, calculating eGFR requires serum creatinine testing.

CKD screening items for workers in existing legislation

The Industrial Health and Safety Act requires urinary protein testing to be performed during general health examinations for workers. Similarly, in specific health checkups performed in accordance with the Act on Assurance of Medical Care for Elderly People for people ages 40 years and over, only urinary protein testing is mandatory, and recommendations to visit a health institution are to be provided when urinary protein values are 1+ or more. Furthermore, in specific health checkups performed in accordance with the Act on Assurance of Medical Care for Elderly People, serum creatinine testing is to be performed “selectively and based on the judgment of a physician” for people whose blood pressure or blood glucose test is above values requiring health guidance. Meanwhile, in general health checkups conducted under the Industrial Health and Safety Act, serum creatinine testing “should be performed when deemed necessary by a physician.”

The significance of conducting serum creatinine testing in health checkups

The advantages of testing serum creatinine in people with underlying diseases

As mentioned above, in addition to mandatory urinary protein testing, serum creatinine testing is also performed at the discretion of physicians performing health checkups for people with underlying diseases such as diabetes or hypertension. Results from these tests allows physicians to grasp kidney function among people with underlying diseases and at high risk of CKD, which makes it possible for them to consider the need for interventions tailored to patient symptoms. Furthermore, employers are no longer obligated to inquire about serum creatinine levels at health institutions visited regularly by people with underlying diseases, which is contributing to streamlined health checkup operations.

¹⁰ Japanese Society of Nephrology. “Evidence-based CKD Clinical Practice Guidelines 2023.” Tokyo Igaku-sha. 2023.

The characteristics of serum creatinine

While proteinuria test results can fluctuate due to factors such as physical condition and timing, serum creatinine levels do not fluctuate significantly. However, these levels can easily vary due to personal factors like gender, age, body size, and muscle mass, so it is inherently difficult to set a uniform cutoff value for requiring a medical examination. Because of this, performing serum creatinine testing and calculating eGFR every year at annual health checkups to gather personal time-oriented data and to evaluate kidney function from the aspect of personalized healthcare makes it possible to connect people to medical services with more effective timing. It is also beneficial for healthcare providers to track eGFR over time, as this makes it easier to provide explanations to patients and motivate them to seek or adhere to treatment.

As previously noted, there are multiple benefits to serum creatinine testing, but one significant benefit is that during screening, it can be performed together with proteinuria testing rather than on its own. People with early-stage CKD may have low eGFR even if their proteinuria level is within the normal range, and some people with CKD may have high urinary protein even with eGFR levels within the normal range. Such patients are said to be at high risk of having their CKD progress in the future. Since CKD requires at least three months of observation to diagnose, measuring both urinary protein and serum creatinine levels over time helps doctors distinguish between temporary fluctuations and ongoing abnormalities, allowing them to diagnose CKD with greater accuracy. While the number of patients is extremely limited, another significant aspect of serum creatinine testing is that it can be used to screen for conditions that cannot be detected with qualitative urinalysis, such as hereditary cystic kidney diseases or tubular disorders.

Advantages of performing serum creatinine testing for health checkup administration

Using serum creatinine testing offers a number of operational benefits when conducting health checkups. First of all, there is no need to collect new samples, so it is less invasive. With insurance coverage, testing only costs about 60 to 110 yen, so the cost can be easily absorbed as part of the health checkup package. Finally, from a privacy perspective, unlike genetic or infectious disease testing, the information obtained is appropriate for employer use.

The circumstances surrounding serum creatinine testing in workers' health checkups

Given the significance of serum creatinine testing, many employers are now choosing to go beyond the legal requirements outlined in the Industrial Health and Safety Act and the Act on Assurance of Medical Care for Elderly People and are conducting it for all insured employees as part of their service and benefit programs. Interviews with the Japan Health Insurance Association and the National Federation of Health Insurance Societies show that many insurers are already conducting serum creatinine testing. The Japan Health Insurance Association (which covers about one-third of Japan's population and includes small and medium-sized companies) conducts serum creatinine testing for all insured parties as part of medical checkups for lifestyle disease prevention. As for the National Federation of Health Insurance Societies, it has not been able to track the total number of insurers implementing serum creatinine testing because it is left to the policies of its members, but it has been reported that testing has been introduced by many companies, including major ones. Over 1,370 insurers have introduced extensive physical examinations called "Human Dock" examinations (which are offered as a service provided by the National Federation of Health Insurance Societies) which include serum creatinine testing as a mandatory testing item. On top of this, while the total number cannot be tracked because testing depends on each government's policy, a growing number of municipalities are conducting serum creatinine testing under National Health Insurance. For example, all municipalities in Kanagawa Prefecture conduct serum creatinine testing.

Summary

Expectations are high for CKD screening to be strengthened by improving understanding among physicians performing health checkups, employers, and insurers. Qualitative urinalysis is simple, cost effective, and easy to evaluate. Given the increased risk for various items with proteinuria response dependency, including end-stage renal failure, cardiovascular disease mortality, and total mortality, it will be necessary to continue strengthening total proteinuria screening. We found that many providers of employee health insurance are already screening for serum creatinine on a voluntary basis. In the future, we have high expectations that

the use of effective intervention methods based on assessment by serum creatinine and eGFR over time will lead to prevention and intervention. In addition, as previously noted, those in the field of occupational health are aware that the initial detection of severe kidney disease is generally unlikely to occur during workplace health checkups, so first, we must be thorough about serum creatinine testing and eGFR calculation based on said testing for people with underlying diseases within existing systems. The utilization of test results will be discussed in Recommendation 2.

3. Recommendation 2: Strengthen efforts to provide recommendations for medical examination and health guidance to people identified as being at risk for CKD during screening.

- Utilizing workers' time-oriented medical examination data, employers, insurers, and primary care physicians should collaborate to effectively provide recommendations for medical examination and health guidance.
- Various actions should be taken to increase the likelihood that workers will seek medical consultations and begin treatment. Employers should select nearby clinics to partner with. Systems should be established for smooth collaboration among physicians who perform detailed medical examinations and industrial physicians or employers. Systems should also be established to educate health professionals and provide follow-up to ensure that people who receive medical examinations are guided to treatment.
- With close collaboration among specialists in kidney diseases, epidemiology, and public health, more robust evidence on items such as real-world circumstances surrounding CKD among workers and the significance of early screening should be generated.

Background items related to this recommendation

Strengthening efforts to provide recommendations for medical examination to at-risk individuals

In a study using data from the Health Insurance Association for Architecture and Civil Engineering Companies, among approximately 70,000 people who received specific health checkups in FY2014, approximately 4,200 people or 6% received an initial diagnosis of CKD.⁹ Among that group, around 210 people or approximately 5% visited a health institution (2% within six months and 3% within twelve months). Meanwhile, approximately 95% or around 3,990 people did not visit a health institution.⁹ It is safe to say that one of the greatest challenges facing CKD strategies for workers is responding to this 95% of people who were diagnosed with CKD but did not (or for some reason, could not) visit a health institution. Early-stage CKD has few subjective symptoms and is unlikely to affect daily life and work, so employers, insurers, and healthcare providers must cooperate to provide people at risk of CKD with follow-up over time. It will also be important to educate health professionals and strengthen the follow-up system so that people who finally visit a health institution thanks to the efforts of insurers do not stop going after only one visit.

Best practices are starting to emerge in some local governments and from the Japan Health Insurance Association in their targeted efforts and measures in improving medical examination uptake and providing follow-up. Expectations are high for innovative efforts to be spread to other providers of employee health insurance and employers in the future. These include cross-referencing medical checkup and medical claims data and providing regular and repeated recommendations or deploying nudge strategies based on the findings; providing visits and consultations from public health nurses; developing and sharing methods of providing recommendations for medical examination and health guidance after stratifying symptoms by severity; and covering appropriate salt intake during health guidance.

While reflecting points of reference from these initiatives, expectations are also high for the introduction of unique measures utilizing resources in occupational health. For example, using time-oriented medical examination data, occupational physicians and occupational health nurses could explain the patient journey during consultations or health guidance and educate all workers on CKD. Also, based on the system that will allow My Number cards to be used as insurance cards, expectations are also high for the establishment of a system that makes full use of medical claims data alongside medical examination data to allow for follow-up that surpasses the boundaries of healthcare and spans multiple areas.

Standardizing criteria for recommendations for medical examination and for examinations themselves, and motivating patients and community physicians to conduct evaluations over time

While it is important to guide people who are at risk for CKD to the right health facilities at the right times, it is difficult to define clear cutoff values for CKD at which people must see a physician. While the CKD Clinical Practice Guidelines should be disseminated, in practice, efforts to ensure standardized diagnosis and treatment among physicians who specialize in areas other than nephrology tend to encounter operational difficulties. At the very least, at companies large enough to have occupational physicians on staff, consideration should be given to intervention methods that take advantage of the availability of time-oriented medical examination data. Specifically, rather than always deciding who requires health guidance or a recommendation for a medical examination based on the results of a single health checkup, workers should be observed over the course of several years. Then, after stratifying those who are at risk and require recommendations for a medical examination immediately from those who are not at risk, intervention methods must be defined according to strata. Doing so is likely to enable the effective use of healthcare resources in communities and help motivate patients to continue attending medical examinations.

The need to generate high-quality evidence for policy promotion

While a great amount of evidence has steadily accumulated, further understanding of real-world circumstances surrounding CKD among workers is still necessary. High-quality evidence must also be generated to further promote policies. Furthermore, with limited medical resources, expectations are also high for comprehensive research from a public health perspective that involves collaboration among specialists in the field of kidney disease and experts in many fields, such as statistics and epidemiology. In the future, it will be important to promote policies based on demonstration experiments and data through multidisciplinary collaboration among the Government, the private sector, and academia, as well as to catalyze discussions that encompass the perspectives of the general public who receive medical examinations, patients, and other affected parties. Nationwide measures should be taken by industry, Government, academia, and civil society, and the Government should expand its budget for CKD strategies. Rather than an issue for senior citizens and people covered by National Health Insurance, employers and providers of employee health insurance must recognize that CKD is an area where interventions for workers are necessary.

These recommendations mainly focus on the need for CKD strategies for workers who are eligible for general health checkups based on the Industrial Health and Safety Act, or general workers and some part-time workers covered by employment-based health insurance. However, despite the fact that they also face the risk of developing CKD, CKD strategies for those not included in those categories – namely, part-time workers and dependents who do not work – are also insufficient compared to those for general workers and similar parties, and this is a major issue. In the future, it will be necessary to continue examining and strengthening CKD strategies for all working generations alongside CKD strategies for people covered by National Health Insurance.

4. HGPI's understanding of past policy discussions on CKD strategies, and promoting policies in the future

Our interviews with experts on this theme revealed the need for joint efforts from industry, Government, academia, and civil society to promote CKD countermeasures that reflect a proper understanding of issues based on evidence and data and the history of relevant policy discussions.

Past discussions on expanding screening at MHLW study groups and other such bodies

For many years, specialists in kidney disease and other such parties have wished to see serum creatinine testing made a mandatory part of both general and specific health checkups. This has also been a frequent topic of discussion at MHLW study groups.

The "Report of the Study Group on Regular Health Examinations Conducted under the Industrial Health and Safety Act" presented in March 2007 states, "Serum creatinine levels rise when there is a significant decline in kidney function, so its importance as a screening item for the early detection of abnormal kidney function is unclear. Therefore, it may be unnecessary to introduce serum creatinine testing as a new health checkup item or to perform it uniformly for all workers." As a result, serum creatinine testing was not added as a new health checkup item for workers.

When the system for specific health checkups and specific health guidance was established in 2008, a number of points were covered in "Examining Urinary Renal Function in Standard Health Checkup and Health Guidance Program (Tentative Version) - Discussion Points for Program Review." These included the potential for urinary protein testing to be more effective than serum creatinine testing for the early detection of renal dysfunction, and that serum creatinine testing may be unnecessary if urinary protein testing is a mandatory testing item. Once again, serum creatinine testing was not added to health checkups.

Discussions on this topic resumed in 2012, during planning for the implementation of the second term of specific health checkups. According to the "Study Group on Health Checkups and Health Guidance – Interim Report,"¹¹ discussions were held on the inclusion of new health examination items that could be considered necessary from a medical perspective (such as those to grasp circumstances surrounding CKD). While discussions touched upon the need to add serum creatinine testing, in the end, it was not included. From the point of view of insurers, issues for its addition included the relationship with abdominal obesity, the potential for improvement through specific health guidance, and whether or not it can be included in the employers' health checkups.

Based on progress in efforts to respond to the aforementioned issues, and because the usefulness of serum creatinine testing was set to be publicized in resources like the "Guidebook on the Smooth Implementation of Specific Health Checkups and Specific Health Guidance," the Study Group on Health Checkups and Health Guidance of the MHLW's Health Insurance Bureau decided to advance arrangements with related parties to examine its inclusion by FY2018, the first fiscal year of the planning period for the third phase of the Implementation Plan for Specific Health Checkups and Other Checkups. At the same time, the Study Group chose to examine the possibility of making it an item for detailed medical examinations in specific health checkups to be provided as necessary in years after an initial specific health checkup.¹² In addition, the Government obligated insurers and other parties that conduct specific health checkups to endeavor to discuss and coordinate in the future. It was also decided that the Study Group on Restructuring Health Examinations and Health Guidance of the Health Insurance Bureau would consider the impact of serum creatinine testing on reducing cardiovascular events, dialysis, and national healthcare expenditures; the serum creatinine testing values for health guidance; the values for issuing recommendations to seek

¹¹ MHLW. "Study Group on Health Checkups and Health Guidance – Interim Report." <https://www.mhlw.go.jp/stf/shingi/2r98520000027va5.html>, Last retrieved on September 10, 2024.

¹² MHLW. "Regarding the Future Structure of Specific Health Checkups and Health Guidance." <https://www.mhlw.go.jp/stf/shingi/2r9852000002fcyl.html>, Last retrieved on September 10, 2024.

medical examinations; points to keep in mind when providing health guidance; and whether or not to set recommended values for urine protein testing and for health guidance.¹³

In 2016, the Study Group on Regular Health Checkups and Equivalent Provided Under the Industrial Health and Safety Act held discussions based on the premise that the purpose of that law is to assess health status for workers in regular employment, and to prevent the onset of diseases of the brain or heart and the exacerbation of lifestyle diseases through measures implemented after grasping employee health status, such as by reducing working hours or altering workplace assignments.¹⁴ As for the measurement of total serum creatinine, it was noted that kidney dysfunction cannot always be detected by urinary protein levels, but it was also pointed out that kidney dysfunction is often associated with underlying diseases like hypertension or diabetes. Based on past discussions at the Study Group on Restructuring Specific Health Checkups and Specific Health Guidance and the Study Group on Health Examinations and Health Guidance Provided by Insurers, the approach regarding kidney function tests performed at regular health checkups and other examinations was that serum creatinine testing would be considered something to be conducted after narrowing down who to test. They also determined that urinary protein testing and urinary occult blood testing would require more knowledge and other efforts, and ultimately, serum creatinine testing was not added.

Also in 2016, the Study Group on Restructuring Specific Health Checkups and Specific Health Guidance (Third Term) discussed the addition of items such as serum uric acid or serum creatinine testing to specific health checkups. At their eighth meeting in November that same year, the Japanese Society of Nephrology offered a recommendation stating, “We request that recommendations to seek medical consultations are issued when urinary protein is positive or higher, and that health guidance provided when urinary protein is at borderline levels; and that recommendations to seek medical consultations are provided when eGFR is under 45 and that health guidance is provided when eGFR is under 60.”¹⁵ Also, because serum creatinine testing was already being performed at many workplaces, some participants wanted those findings to be used to provide interventions based on the aforementioned criteria. Some also wanted to see the measurement of total serum creatinine included whenever possible. However, other participants pointed out the need to accumulate further evidence to support the definitions in those recommendations, or the need to consider additions to checkups based on the purpose of the law providing the basis for specific health checkups, which are to “target lifestyle diseases based on visceral obesity.” The question was also raised as to whether there would be sufficient medical capacity when health checkups result in patients needing health guidance or subsequent medical examinations. Participants recognized the effectiveness of serum creatinine testing, but they also noted that there is a wide range of variation from actual measured values, which could result in overestimation depending on the target population. It was also pointed out that it is possible to provide medical interventions through recommendations to seek medical examination, but because the values that require health guidance or recommendations to seek medical examination were undefined, the measures to implement after testing were unclear. While a variety of opinions were shared, in the end, there were concerns toward the mandatory inclusion of serum creatinine testing in health checkups. The Study Group ultimately concluded that serum creatinine testing should be performed selectively when deemed necessary by a physician, for people who meet certain criteria for blood pressure or blood glucose. (Namely, for blood pressure: (a) systolic blood pressure of 130 mmHg or higher, or (b) diastolic blood pressure of 85 mmHg or higher. For blood glucose: (a) fasting blood glucose of 100 mg/dl or higher, (b) HbA1c (NGSP) of 5.6% or higher, or (c) casual blood glucose of 100 mg/dl or higher.)¹⁶

While reflecting on the collective developments of these past policy discussions, we must give further consideration as to how to tailor kidney disease strategies to the social contexts and available resources in the future.

13 MHLW. “The 9th Meeting of the Study Group on Health Examinations and Health Guidance Provided by Insurers – Minutes (June 18, 2012).” <https://www.mhlw.go.jp/stf/shingi/2r9852000002foc1.html>, Last retrieved on September 10, 2024.

14 MHLW. “Report of the Study Group on Regular Health Checkups and Equivalent Provided Under the Industrial Health and Safety Act.” <https://www.mhlw.go.jp/stf/shingi2/0000146412.html>, Last retrieved on September 10, 2024.

15 MHLW. “The 8th Meeting of the Study Group on Restructuring Specific Health Checkups and Specific Health Guidance (November 8, 2016).” <https://www.mhlw.go.jp/stf/shingi2/0000145674.html>, Last retrieved on September 10, 2024.

16 MHLW. “The 10th Meeting of the Study Group on Restructuring Specific Health Checkups and Specific Health Guidance - Reference Materials.” <https://www.mhlw.go.jp/stf/shingi2/0000167148.html>, Last retrieved on September 10, 2024.

The need to consider intervention methods based on the backgrounds and characteristics of people who have yet to attend medical examinations

While discussions on which items to include in screening are ongoing, it is also true that medical interventions for CKD for people with proteinuria, diabetes, or hypertension are inadequate. Approaching this issue from multiple angles will be vital in ensuring at-risk individuals are provided with follow-up and treatment in a timely manner. Regarding efforts to ensure these are provided, however, the fact remains that in the past, all stakeholders have encountered difficulties when attempting to provide effective interventions. It may be the time for industry, Government, academia, and civil society to deepen discussions on people who have yet to attend medical examinations, and to discuss the specific roles of each stakeholder to ensure such people are thoroughly guided to healthcare. In FY2024, HGPI plans to conduct a survey to clarify the backgrounds of people who are at risk for CKD and have received recommendations for medical examination but have yet to attend them, and to identify the differences between those who have not attended medical examinations and those who have. The findings will then be summarized in policy recommendations.

Providing predialysis CKD patients with support for balancing treatment and work

Alongside early detection and intervention, in the field of occupational health, it is particularly important to provide workers in the predialysis phase of CKD with understanding and support. A number of actions will be necessary to enable predialysis CKD patients to continue treatment and work. These include providing follow-up from occupational physicians and occupational health nurses, providing nutritional guidance, raising awareness in workplaces, and creating environments that make it easier for people to make hospital visits or take leave when they are unwell. Employers should also consider measures for people whose condition is severe, such as assigning them duties where they can stay off their feet, or helping them avoid long working hours.

5. Acknowledgments

These policy recommendations were compiled based on interviews with experts in industry, Government, academia, and civil society. We express our deepest gratitude to everyone who lent their cooperation. Please note that these recommendations were compiled by HGPI in its capacity as an independent health policy think tank, and that they do not in any way represent the views of any related party who assisted in their creation, or of the organizations to which those parties belong. This report is copyright 2024 Health and Global Policy Institute.

Interview participants (In Japanese syllabary order; titles omitted)

Kaori Ishii	(Health Nurse, Deputy Manager, Health Group, Tokyo Branch, Japan Health Insurance Association)
Tomonori Okamura	(Professor, Preventive Medicine and Public Health, Keio University School of Medicine)
Naoki Kashihara	(Chairman, Japan Kidney Association Past President, Japanese Society of Nephrology Director, Kawasaki Geriatric Medical Center Honorary professor, Kawasaki Medical School, Department of Nephrology and Hypertension)
Kiyoshi Kurokawa	(Honorary Chairman for Life, Health and Global Policy Institute)
Takeshi Shukunobe	(President and CEO, PPeCC/ Power to the People with Chronic Conditions)
Kazuyo Tsushita	(Specially-Appointed Professor, Kagawa Nutrition University)
Yuki Hirasawa	(National Federation of Health Insurance Societies, Support Department, Health Business Group)
Akira Fukui	(Lecturer, Division of Nephrology and Hypertension, Department of Internal Medicine, Jikei University School of Medicine)
Hiroshi Fukuda	(Project Professor, Department of Advanced Preventive Medicine and Health Literacy, Juntendo University Graduate School of Medicine)
Shingo Fukuma	(Professor, Department of Epidemiology, Infectious Disease Control and Prevention, Hiroshima University Graduate School of Biomedical and Health Sciences/ Professor, Human Health Sciences, Kyoto University Graduate School of Medicine)
Mariko Miyazaki	(Associate Professor, Division of Nephrology, Tohoku University Graduate School of Medicine)
Yoko Miyamoto	(Executive Director, Japan Association of Kidney Disease Patients; Person living with a kidney disease)
Masashi Mukoyama	(Professor, Department of Nephrology, Faculty of Life Sciences, Kumamoto University)
Koji Mori	(President, Japan Society for Occupational Health/ Professor, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health)

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The mission of HGPI is to improve the civic mind and individuals' well-being, and to foster a sustainable healthy community by shaping ideas and values, reaching out to global needs, and catalyzing society for impact. The activities of the Institute are supported by organizations and individuals who are in agreement with this mission.

2. Political Neutrality

HGPI is a private, non-profit corporation independent of the government. Moreover, we receive no support from any political party or other organization whose primary purpose is political activity of any nature.

3. Independence of Project Planning and Implementation

HGPI makes independent decisions on the course and content of its projects after gathering the opinions of a broad diversity of interested parties. The opinions of benefactors are solicited, but the Institute exercises independent judgment in determining whether any such opinions are reflected in its activities.

4. Diverse Sources of Funding

In order to secure its independence and neutrality, HGPI will seek to procure the funding necessary for its operation from a broad diversity of foundations, corporations, individuals, and other such sources. Moreover, as a general rule, funding for specific divisions and activities of the Institute will also be sought from multiple sources.

5. Exclusion of Promotional Activity

HGPI will not partake in any activity of which the primary objective is to promote or raise the image or awareness of the products, services or other such like of its benefactors.

6. Written Agreement

Submission of this document will be taken to represent the benefactor's written agreement with HGPI's compliance with the above guidelines.

Project sponsors (In Japanese syllabary order)

AstraZeneca K.K.

Nippon Boehringer Ingelheim Co., Ltd.

Health and Global Policy Institute (HGPI)

Grand Cube 3F, Otemachi Financial City, Global Business Hub Tokyo
1-9-2, Otemachi, Chiyoda-ku, Tokyo 100-0004 JAPAN

TEL: +81-3-4243-7156 FAX: +81-3-4243-7378 E-mail: info@hgpi.org

