





Optimizing the use of outcome information in consultation rooms: development of a CKD patient dashboard D.E.M. van der Horst, E. Parent, C.F. van Uden-Kraan, A.H. Pieterse, M.A. van den Dorpel, W.J.W. Bos

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In Chronic Kidney Disease (CKD) stages 3b-4 the main treatment goals are slowing down disease progression and lowering cardiovascular risk^{1,2}. Long term medication and lifestyle interventions are the pillars of CKD management, making patient activation highly important^{2,3}. Patient activation (PA), defined by Hibbard et al. is 'having the knowledge, skills and confidence to take an active role in managing your condition^{'4}. In CKD patients, disease knowledge and PA levels appear to be low^{5,6,7,8}. The use of outcome data in the consultation room, on patient individual level, might improve this. The aim was to develop a dashboard that 1) shows PROMS, 2) makes clinical feedback and treatment goals explicit and 3) increases clarity of

information during consultations by using data visualization techniques.



*Kidney patient representatives, nephrologists, dedicated nurses, patient federation representative, dieticians, total n=15

Professionals and patients agreed on a set of relevant variables (PROMs, clinical measurements, laboratory results) and conditions for data visualization; e.g. 'layering' information to address varying information needs of patients. Patient participation made clear that the consultation dashboard also needs to be available at home, affecting the dashboard's design massively. Patients reported the potential of the dashboard in increasing condition understanding and motivating in treatment goals. Professionals reported that it can support the consultation conversation and decision making, especially by discussing PROMS and changes over time. Both parties warned that the dashboard should not overtake the patient-clinician conversation. The dashboard has 5 pages: overview course of disease (fig 1), physical and mental health (PROM) (fig 2), experienced symptoms (PROM), treatment goals for slowing down CKD progression (fig 3) and effects of kidney damage (fig 4). The images show no real patient data and are in Dutch.



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Conclusion: Patient participation is highly important in dashboard development. Dashboarding has the potential to enhance the two way flow of information during consultations, setting the basis for patient activation and shared decision making.

Next steps







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References

1. Couser WG, Remuzzi G, Mendis S, Tonelli M. The contribution of chronic kidney disease to the global burden of major noncommunicable diseases. Kidney Int [Internet]. 2011;80(12):1258–70. 2. Kidneydisease. KDIGO 2012 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Off J Int Soc Nephrol [Internet]. 2013;3(1) 3. Hibbard JH, Stockard J, Mahoney ER, Tusler M. Development of the patient activation measure (PAM): Conceptualizing and measuring activation in patients and consumers. Health Serv Res. 2004;39(4 I):1005-26. 4. Molnar AO, Akbari A, Brimble KS. Perceived and Objective Kidney Disease Knowledge in Patients With Advanced CKD Followed in a Multidisciplinary CKD Clinic. Can J Kidney Heal Dis. 2020;7(1). 5. Wright J, Wallston K, Elasy T, Ikizler T, Cavanaugh K v. Development and Results of a Kidney Disease Knowledge Survey Given to Patients With CKD. Am J Kidney Dis. 2010;57(3):387–95. 6. Nair D, Cavanaugh KL. Measuring patient activation as part of kidney disease policy: Are we there yet? J Am Soc Nephrol. 2020;31(7):1435–43. 7. Gair R, Steenkamp R, Caskey F, Cullen R. Valuing Individuals : Transforming Participation in Chronic Kidney Disease Clinician Support for Patient Activation Measure (CS-PAM) Survey, Cohort 1. 2017;(oct):1–45. 8. Levey AS, Atkins R, Coresh J, Cohen EP, Collins AJ, Eckardt KU, et al. Chronic kidney disease as a global public health problem: Approaches and initiatives - A position statement from Kidney Disease Improving Global Outcomes. Kidney Int [Internet]. 2007;72(3):247–59.