

# Does Medicines Optimisation improve quality of life and healthcare experience for people receiving haemodialysis?

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## Background:

**People receiving haemodialysis, have the highest medicine burden of all chronically ill populations.**  
This high medicine burden, exposes people to medication related problems impacting on quality of life and healthcare experience.  
Medicines optimisation, reviewing medicines to manage polypharmacy and improve outcomes, in the general population, is associated with decreased risk of death, decreased referral to nursing home, lower drug costs and improvements in patient's perception of health.

## Methods:

**Database Search:**  
Cochrane, Google scholar, Delphi, CINAHL, Medline and via OVID, Embase, Amed and Ovid Emcare

**Search terms:**

<b>P</b>	<b>Patient or Problem</b>	Adult patients receiving haemodialysis.	Adults, frail older adults, elderly Dialysis; dialysis, renal; hemodialysis; renal dialysis; chronic renal failure
<b>I</b>	<b>Intervention</b>	Medicines optimisation.	Individualized medicine, medication management, polypharmacy, medication adherence, inappropriate medication
<b>C</b>	<b>Comparison</b>	No comparison – usual care	
<b>O</b>	<b>Outcome</b>	Healthcare experience.	Health-related quality of life, quality of life

**Identified Articles:**

- George, J. S. (2021). "Active deprescribing program in chronic kidney disease patients undergoing haemodialysis." *Nephrology (Carlton, Vic.)* 26(11): 890-897.
- McIntyre, C., et al. (2017). "Targeted Deprescribing in an Outpatient Hemodialysis Unit: A Quality Improvement Study to Decrease Polypharmacy." *American Journal of Kidney Diseases* 70(5): 611-618.
- Parker, K., et al. (2019). "Effectiveness of using STOPP/START criteria to identify potentially inappropriate medication in people aged ≥ 65 years with chronic kidney disease: a randomized clinical trial." *European Journal of Clinical Pharmacology* 75(11): 1503-1511.



## Results:

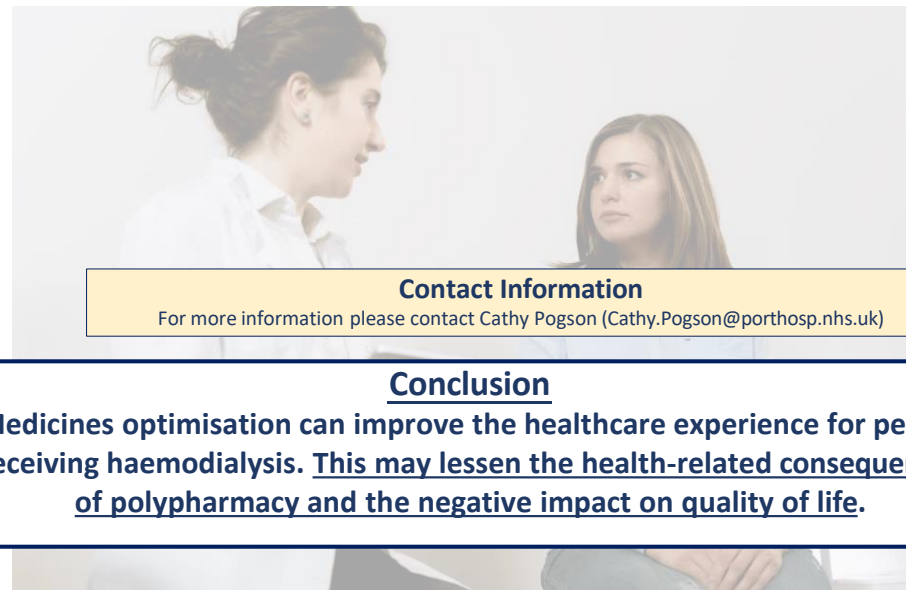
**Medicines optimisation for patients receiving haemodialysis identifies high numbers of potentially inappropriate medications and high numbers of omitted indicated medicines.**

All three identified studies **significantly reduce polypharmacy**, using different refined deprescribing tools.

George, J. S. 2021 reports a significant improvement in patient reported Living with Medicines Score following deprescribing together with a (non-significant) improvement in adherence.

McIntyre, C. 2017 describe no negative impact on self-reported patient satisfaction but did not capture impact upon quality of life.

Parker, K. 2019 using the criteria from Screening Tool for Older Persons' Prescriptions (STOPP) and Screening Tool to Alert Doctors to the Right Treatment (START), identified significant numbers of medicines for review but did not improve medication adherence or the healthcare experience for people receiving haemodialysis.



### Contact Information

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### Conclusion

**Medicines optimisation can improve the healthcare experience for people receiving haemodialysis. This may lessen the health-related consequences of polypharmacy and the negative impact on quality of life.**