**Pain management claim appeals among California managed care patients, 2001-2021**

If a health plan denies requested medically necessary services, consumers can apply for independent medical review (IMR) to potentially overturn the initial denial. We analyzed trends in pain management (PM) IMR from 2001 to 2021 using California Department of Managed Health Care (CDMHC) data.

IMR decisions for CDMHC patients requesting medically necessary PM services from 2001 to 2021 were analyzed. Relationships between IMR ruling and patient age group, gender, service category, injection type, IMR type, and diagnosis category were analyzed by $\chi^2$ test in SPSSv28. Median days to adoption of IMR ruling was calculated.

Between 2001-2021, 875 denied PM claims for necessary services were appealed under the CDMHC. Of these claims, 105 were analgesic prescriptions, 559 injections, 53 for peripheral nerve blocks, and 158 for other services. 577 denials (65.9%) were overturned by IMR with mean adoption time 27 days. 11-30 year olds were more likely to have denials upheld, while 31+ year olds were more likely to receive services (31-50 and 65+ years old, $p<0.001$; 51-64 years old, $p=0.003$). Injection services appeals were more successful (81.2%) compared to other types of services ($p<0.001$). Nerve block denials were more likely to be overturned than analgesic medication denials (50.9% vs 24.8%, $p<0.001$). Musculoskeletal diagnosis claims were more likely to be approved compared to any other diagnoses ($p<0.001$).

66% of California PM appeals were overturned by IMR and adopted after an average of 27 days, suggesting a tendency for managed care to inappropriately deny claims and delay treatment. PM specialists may consider using injection services over other services, provided medically equivalent, in order to avoid denials or delays in treatment. Our findings also support American Hospital Association policy advice of standardizing the timeline of service requests and streamlining appeal processes to mitigate delays in PM care.