

USING PRECISION MEDICINE TO ADDRESS THE CHALLENGES OF POLYPHARMACY

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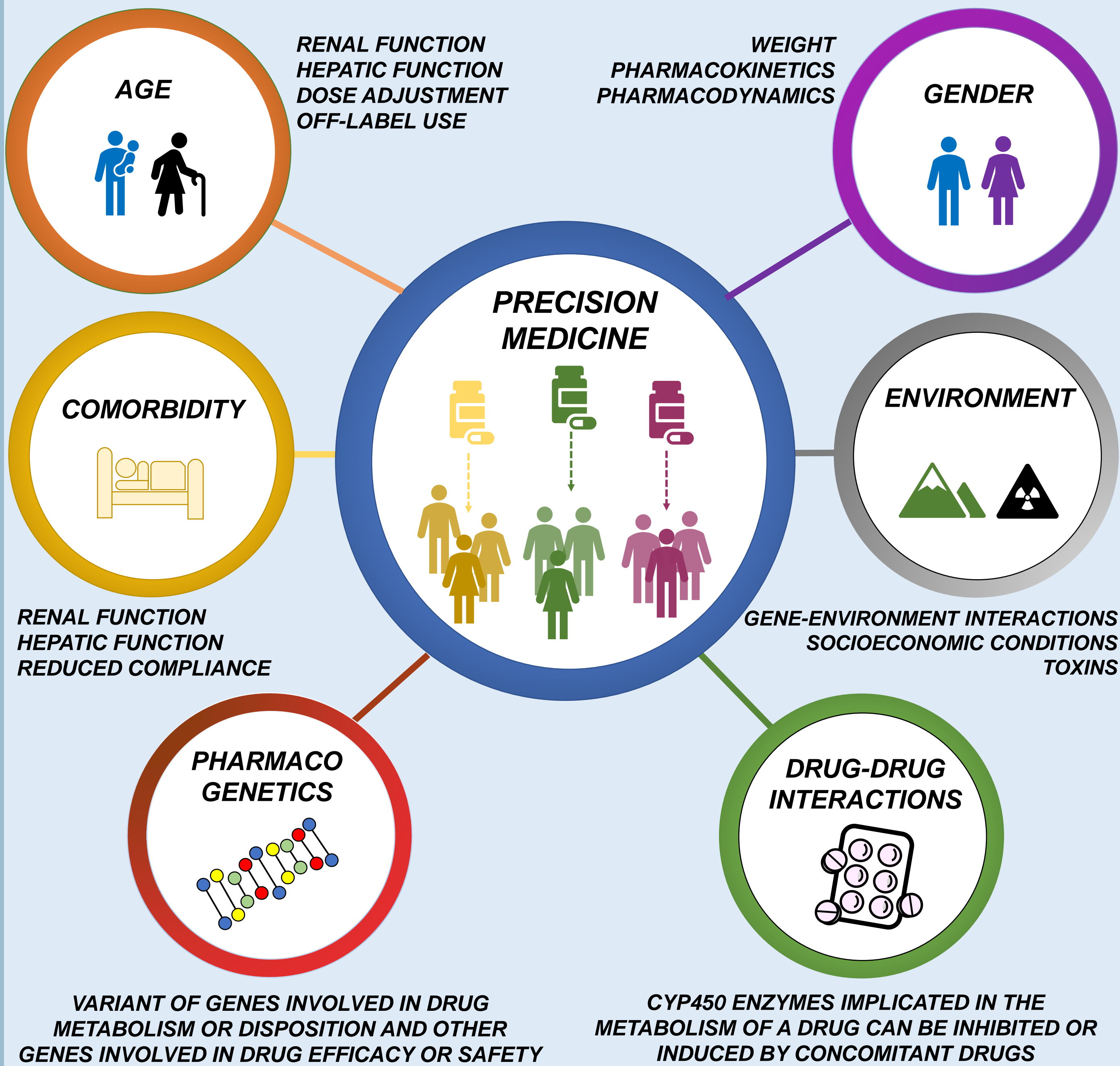
POLYPHARMACY:

- REGULAR USE OF AT LEAST FIVE MEDICATIONS
- GROWING AS THE AGE OF THE POPULATION INCREASES
- THE RISK OF ADVERSE EFFECTS INCREASES WITH INCREASING NUMBERS OF MEDICATIONS

PRECISION MEDICINE:

IDENTIFYING SAFER AND MORE EFFECTIVE THERAPEUTIC APPROACHES BASED ON GENETIC, ENVIRONMENTAL AND LIFESTYLE FACTORS

IMPLEMENTING PRECISION MEDICINE IN CLINICAL PRACTICE MEANS THAT PRESCRIBING TAKES INTO CONSIDERATION:



CHALLENGES TO ADDRESS

- REDUCE THERAPEUTIC FAILURE
- AVOID ADVERSE DRUG REACTIONS AND INAPPROPRIATE PRESCRIBING OF ADDITIONAL DRUGS
- INCREASE ADHERENCE AND COMPLIANCE
- INCREASE INCLUSION AND EQUITY: CONSIDER NEEDS OF GROUPS UNDER-REPRESENTED IN CLINICAL GUIDELINES

ASSETS

- TRAINING AND EDUCATION:**
- INCREASE KNOWLEDGE OF COMMON CAUSES OF MEDICATION ERRORS
 - PROMOTE ACTIVE INVOLVEMENT OF PATIENTS AND FAMILY MEMBERS
- ADVANCES IN TECHNOLOGY:**
- REDUCED SEQUENCING COSTS
 - COMPUTERIZED INFORMATION SYSTEMS