```
Definition va_load p σ rs rd va :=
  match ZMap.get (PDX va) (pgmap_p σ) with
    PDEValid _ pte =>
      match ZMap.get (PTX va) pte with
        | PTEValid pg _ =>
          Next (rs # rd <-
            FlatMem.load (HP σ) (pg*PGSIZE + va%PGSIZE))
        | PTEUnPresent => exec_pagefault p σ rs va
      end
  end.
```